

1974

Virginia Commonwealth University Bulletin

Virginia Commonwealth University

Follow this and additional works at: <http://scholarscompass.vcu.edu/vcubulletins>

© Virginia Commonwealth University

Downloaded from

<http://scholarscompass.vcu.edu/vcubulletins/132>

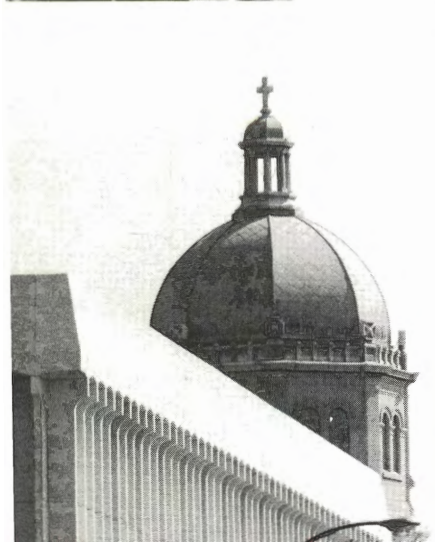
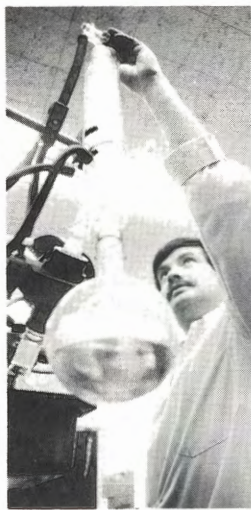
This Bulletin is brought to you for free and open access by the VCU University Archives at VCU Scholars Compass. It has been accepted for inclusion in VCU Bulletins by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.

*Louise King - Room 1-073
Sanger Hall*



BULLETIN

Virginia Commonwealth University
Richmond, Virginia
Academic Campus
1974-75



The Board of Visitors, the administration, and the faculty of Virginia Commonwealth University are committed to a policy of equal opportunity in education without regard to race, creed, sex, or national origin.

**VIRGINIA COMMONWEALTH UNIVERSITY
BULLETIN**

Academic Campus
1974-75

Volume XLIX

August 1974

No. 7

PREFACE

Virginia Commonwealth University was created by an act of the General Assembly of Virginia during its 1968 session. The university was formed, effective July 1, 1968, by combining Richmond Professional Institute and the Medical College of Virginia. RPI became the nucleus of the Academic Campus, and MCV was designated as the MCV Campus of the university.

TABLE OF CONTENTS

	Page
Preface	2
University Calendar	4
Part	
I The University and Its Students	9
II Undergraduate Admission	32
III Expenses and Financial Aid	44
IV Student Life and Services	56
V Academic Regulations	64
VI The School of the Arts	76
VII School of Arts and Sciences	117
VIII School of Business	214
IX School of Community Services	242
X School of Education	269
XI Curriculum in Engineering	300
XII School of Social Work	302
XIII Board of Visitors, Administration, and Faculty	305
Index	366
Campus Map	Inside Back Cover

1974-1975 UNIVERSITY CALENDAR

AUGUST						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

2
Last day for non-summer school students to submit all required transcripts, etc., for admission to a degree program for fall semester

26
General faculty meeting at 10:30 a.m.
Faculty advisors' meeting at 2 p.m.

26-30
Orientation for all new degree seeking students

26-28
Orientation and registration, MCV Campus

27-28
Evening College registration

28-30
Advising and registration for continuing, re-admitted, and new degree-seeking day students.

29
Classes begin at 8 a.m., MCV Campus

30
Registration for non-degree-seeking day students

SEPTEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

2
Labor Day holiday

3
Classes begin at 8 a.m., Academic Campus

3-6
Add/drop and late registration for day students

6
Last day to submit a special day application

9
Last day to withdraw and receive 80 percent refund

16
Last day to withdraw and receive 60 percent refund

23
Last day to withdraw and receive 40 percent refund

27
Last day for special day students to submit required admission documents to receive credit for fall semester

30
Last day to withdraw and receive 20 percent refund

OCTOBER						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

1
Last day for degree candidates to file application for January degrees

12
Last day to drop a course with grade of "W"

14-19
Mid-semester evaluation

23
Mid-semester grades due in registrar's office by 9 a.m.

NOVEMBER						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

1
Advance registration —Evening College

4-15
Advising and registration for continuing degree-seeking day students for spring semester

16
Last day to drop a course with grade of "WF" or "WP"

27
Thanksgiving holiday begins at 1 p.m. for Academic Campus; at 5 p.m. for MCV Campus

29
Final date for oral defense of graduate theses for January completion of degrees

DECEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

2
Last day to submit an application for admission or re-admission to a degree program for spring semester

2
Thanksgiving holiday ends at 8 a.m.

11
Last day of classes, Academic Campus

12-21
Final examinations, Academic Campus

13
Last day of classes, MCV Campus

14
Last day of Evening College classes

16-20
Final examinations, MCV Campus

21
Christmas vacation begins at 12 Noon

27
All fall semester grades due in registrar's office by 9 a.m.

JANUARY						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

1
Last day to submit all required transcripts, etc., for admission to a degree program for spring semester

7
Placement testing for all new degree-seeking students

7-8
Evening College registration

8
Christmas vacation ends at 8 a.m.

8-9
Advising and registration for continuing, re-admitted, and new degree-seeking day students

10
Registration for day non-degree-seeking students

13
Classes begin at 8 a.m.

13-14
Add/drop and late registration for all day students

14
Last day to submit a special day application

17
Last day to withdraw and receive 80 percent refund

24
Last day to withdraw and receive 60 percent refund

31
Last day for spring degree candidates to file application for May graduation

Last day for special day students to submit required admission documents to receive credit for spring semester

Last day to withdraw and receive 40 percent refund

FEBRUARY						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

7
Last day to withdraw and receive 20 percent refund

21
Last day to drop a course with grade of "W"

24-28
Mid-semester evaluation

MARCH						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

7
Mid-semester grades due in registrar's office by 9 a.m.

Spring vacation begins at 5 p.m., MCV Campus

8
Spring vacation begins at 12 Noon, Academic Campus

17
Spring vacation ends at 8 a.m.

31 to Apr. 11
Advising and registration for continuing, degree-seeking day students for fall semester

APRIL						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

14
Begin summer advance registration

18
Last day to drop a course with grade of "WF" or "WP"

25
Final date for oral defense of graduate theses for May graduation

MAY						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

2
Last day of classes, MCV Campus

3
Last day of classes, Academic Campus

5-13
Final examinations

15
All spring semester grades due in registrar's office by 9 a.m.

17
Commencement

19
Pre-session begins

JUNE						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

4-5
Summer Sessions registration

6
End of pre-session

9
Six-week session and summer evening classes begin

JULY						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

18
Six-week session ends

Registration for post sessions

21 to Aug. 8
Three-week post session

21 to Aug. 22
Five-week post session

Aug. 6-7
Summer evening classes end

1975-76 UNIVERSITY CALENDAR

AUGUST						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

1
Last day for non-summer school students to submit all required transcripts etc., for admission to a degree program for fall semester

25-27
Orientation and registration, MCV Campus

26
General faculty meeting at 10:30 a.m.
Faculty advisors' meeting at 2 p.m.

26-27
Registration for Evening College

27
Placement testing for all new degree-seeking students

28
Advising and registration for continuing, re-admitted, and new degree-seeking day students

Classes begin at 8 a.m., MCV Campus

29
Registration for non-degree-seeking day students

SEPTEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

1
Labor Day holiday, MCV Campus

2
Classes begin at 8 a.m., Academic Campus

2-5
Add/drop and late registration for all students

5
Last day to submit special day applications for fall semester

26
Last day for special day students to submit required admissions documents to receive credit for fall semester

OCTOBER						
S	M	T	W	T	F	S
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

1
Last day for degree candidates to file application for January degrees

10
Last day to drop a course with grade of "W"

13-18
Mid-semester evaluation

22
Mid-semester grades due in registrar's office by 9 a.m.

27
Last day to process a change of major for spring semester, Academic Campus

NOVEMBER						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

1
Advance registration—Evening College

3-14
Advising and advance registration for continuing, degree-seeking, day students for spring semester

15
Last day to drop a course with grade of "WP" or "WF"

26
Thanksgiving holiday begins at 1 p.m. for Academic Campus; at 5 p.m. for MCV Campus

DECEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

1
Thanksgiving holiday ends at 8 a.m.

Last day to submit an application for admission or re-admission to a degree program for spring semester

10
Last day of day classes for fall semester, Academic Campus

11-19
Final examinations for day classes for fall semester, Academic Campus

12
Last day of classes for fall semester, MCV Campus

15-19
Final examinations for fall semester, MCV Campus

15-20
Final examinations for fall semester, Evening College

19
Final date for oral defense of graduate theses for December completion of degrees

Christmas vacation begins at 5 p.m., MCV Campus

20
Christmas vacation begins at 12 Noon, Academic Campus

24
All fall semester grades due in registrar's office by 12 Noon

JANUARY						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

2
Last day to submit all required transcripts, etc., for admission to a degree program for spring semester

6-7
Evening College registration

7
Placement testing for all new degree-seeking students

8
Christmas vacation ends at 8 a.m.

Advising and registration for continuing, re-admitted, and new degree-seeking day students

9
Registration for day non-degree-seeking students

Orientation and registration for new students, MCV Campus

12
Classes begin at 8 a.m.

12-16
Add/drop and late registration for all students

16
Last day to submit special day applications for spring semester

30
Last day for spring degree candidates to file application for May graduation

FEBRUARY						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						

6
Last day for special day students to submit required admission documents to receive credit for spring semester

20
Last day to drop a course with grade of "W"

23-28
Mid-semester evaluation

MARCH						
S	M	T	W	T	F	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

5
Mid-semester grades due in registrar's office by 9 a.m.

Spring vacation begins at 5 p.m., MCV Campus

6
Spring vacation begins at 12 Noon, Academic Campus

Last day to process a change of major for fall semester, Academic Campus

15
Spring vacation ends at 8 a.m.

22
Summer advance registration begins

29 to Apr. 9
Advising and registration for continuing, degree-seeking day students for fall semester

APRIL						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

16
Last day to drop a course with grade of "WF" or "WP"

30
Last day of classes for spring semester, MCV Campus

MAY						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

1
Last day of day classes for spring semester, Academic Campus

3-8
Evening College examinations

3-11
Final examinations for day classes for spring semester

11
Final date for oral defense of graduate theses for May graduation

13
All spring semester grades due in registrar's office by 9 a.m.

15
Commencement

17
Summer pre-session begins

JUNE						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

2-3
Summer Session registration

4
Pre-session ends

7
Six-week session begins

Summer Evening College begins

JULY						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

16
Six-week session ends

Registration for post sessions

19
Five- and three-week post sessions begin

AUGUST

4-5
Summer Evening College ends

6
Three-week post session ends

20
Five-week post session ends

Final date for oral defense of graduate theses for August completion of degrees



PART I—THE UNIVERSITY AND ITS STUDENTS

VCU TODAY

Virginia Commonwealth University is a coeducation, state-supported university located in Richmond, Virginia, enrolling more than 17,000 students. The Academic Campus enrolls over 14,800 students in The Schools of the Arts, Arts and Sciences, Business, Community Services, Education, and Social Work. There are approximately 8,500 full-time undergraduate degree-seeking students, about 6,300 part-time students, and more than 2,400 students pursuing graduate programs. The undergraduate enrollment includes approximately 2,000 freshmen and 1,000 transfer students each fall. The Medical College of Virginia Campus (MCV), located two miles downtown, enrolls over 2,300 students and offers health-related programs of study.

The university has a diverse student body. Eighteen to 21-year-old “college age” students pursue their education with individuals from every segment of society in VCU’s arena of intellectual challenge. Although the majority of students on both campuses claim the east coast as their home, students from 46 states and 21 foreign countries comprise the cosmopolitan student body.

Students choose to study at VCU for a variety of reasons. Perhaps the most impelling is the university’s urban setting. The location of the campus, in the center of Virginia’s capital city, allows the majority of students to commute easily to class, either from their homes or from apartments rented in the large residential neighborhood surrounding the university.

Dormitory facilities are available to allow students who want to live on campus to do so.

The university is attractive to many of today's youth, students who live and study here have the opportunity to be a part of the excitement of the city. VCU seeks, by design and action, to become a part of the city without constructing the traditional academic walls. Its Academic Campus is located in a residential area, Richmond's "Fan District"—often called a "Georgetown below the Potomac." Many of the Fan District's architecturally significant older structures have been purchased and preserved by the university and are used as classrooms and office buildings. New university structures are melded into, and designed to be sympathetic with, older residences and structures surrounding the campus.

While the university is committed to preserving time-honored structures, expansion of the physical plant on the Academic Campus has been extensive with the completion of the James Branch Cabell Library; the School of Business Building; the Pollak Building for the School of the Arts; Rhoades Hall, a modern dormitory; and additions to the Hibbs classroom Building and the Gymnasium. A new science and education building is presently under construction and in the planning stages are a Student Union and a Center for the Performing Arts.

OPPORTUNITIES AVAILABLE FOR VCU STUDENTS

Life at VCU is one of the diverse opportunities, especially of gaining quality education in one's chosen field of study. The university offers, in addition, many varied opportunities for attaining individual growth, satisfaction, and understanding.

Opportunities for Quality Education

A broad span of degree programs is offered by the 12 schools of the university on the Academic and MCV Campuses.

The scheduling of the educational programs gives the university an educational profile unlike that of its sister institutions. Education at VCU is offered in the day, at night, on the weekends, and is extended throughout the summer in three, six, nine, and twelve-week sessions.

The university continues to recognize that many students in the urban-located universities must earn while they learn. For this reason, the flexibility of programming both day and evening classes in great numbers has allowed students to work part- or full-time while seeking a degree.

VCU's Evening College, one of the largest in the nation today, has over 1,700 course sections for credit. Evening College offerings are academically integrated with the day program.

The part-time student has opportunity for graduate study in a number of fields.

Supervisory and management training are offered to night-shift workers in industrial plant classrooms.

Selected courses, for example, introductory mathematics, are designed to allow the students to proceed at their own pace.

The College Level Examination (CLEP) allows students the opportunity to gain as many as 54 college credits without having to register officially for college classes.

VCU's student-faculty ratio is 16 students to 1 faculty member.

Over 635 full-time faculty members on the Academic Campus are dedicated to teaching and encouraging out-of-classroom contact between themselves and their students. A part-time faculty of over 300 brings the expertise of businessmen, lawyers, and state agency heads and others with special knowledge and skills to supplement the strengths of the full-time faculty.

Each student is assigned a faculty advisor who will help with course selection and registration procedures. The advisors are available for counseling on any academic problem.

Among the many advantages of the university is the growing effect of interdisciplinary cooperation and effort among the many professionals and scientists now gathered in the university community. Scholars in the various schools and departments meet with one another, discuss mutual problems, and form alliances of knowledge and expertise.

Virginia Commonwealth University is gaining momentum rapidly in a research effort that has already achieved national significance in several areas. VCU has been listed among the nation's top 100 universities in the amount of funds received from non-state sources for research and education—this honor came in 1971 when the university placed 56th among the nation's 2,400 colleges and universities and top among institutions of higher education in the Commonwealth. In its first five years, VCU has received more than \$45,500,000 in research and training grants.

Substantial opportunities in the field of continuing education are provided. Since 1968, the institution has provided educational renewal for more than 100,000 persons in fields ranging from medicine to the arts, from philosophy to computer sciences, from criminal justice planning to dentistry, from Russian language instruction to tax accounting.

As a form of laboratory, the city has in large measure permeated the university's programs, providing internships in the practical solution of urban problems for students in many disciplines.

Much of the enthusiasm expressed by students, faculty, and staff for VCU springs from the excitement of learning, teaching, and working in an urban setting and establishing a real rapport with agencies of governments, social service agencies, and planning agencies intimately involved with problems of the city and its urban-suburban surroundings.

Opportunities for Self-Enrichment

Unlike some large universities, VCU is not totally dependent upon its

campus resources. The university draws upon the community and the community, in turn, draws upon the resources of the university.

The outstanding art collections of VCU's Anderson Gallery and the Departments of Music and Theatre's concerts and productions provide enrichment opportunities for those interested in the arts.

The students in the Department of Music and other schools of the university interested in musical performances have the opportunity to participate in any of the two bands, four choral groups, two orchestras, one stage band, and various ensemble groups sponsored by VCU.

Each of the visual arts departments in the School of the Arts presents one faculty and student major exhibition each year in the Anderson Gallery.

The broad-range art collections of the Virginia Museum, and the drama productions of its theatre, and nearby dinner theatres provide enrichment opportunities for those interested in the arts.

Richmond Symphony concerts are presented adjacent to the campus as are touring plays and concerts.

Visiting artists and lecturers are regularly brought to the campus by student clubs.

Persons of national importance selected by a student committee speak at university convocations.

The Virginia State Library, the Richmond Public Library, the libraries of two other universities and a theological seminary, and the specialized technical libraries of state agencies and local businesses are regularly drawn upon by VCU students.

The Smithsonian and the many federal government facilities in Washington, D.C. are less than two hours from Richmond by car or bus.

Opportunities for Employment

A city of 536,000 persons, with a good public transportation system, Richmond offers excellent and diverse opportunities for part-time employment. Over half of the student body are employed at least part-time during their academic careers, with the university providing an excellent job referral service.

The university work-study program provides on-campus employment for qualifying persons.

Student personnel are also hired by the many university departments and offices, such as the library, bookstore, departmental offices, and maintenance and ground crew.

Music students give private lessons to local residents.

Department of Theater students find part-time, job-related employment and experience in more than half-a-dozen local commercial theaters.

Community-service-oriented students find opportunities available with city and state agencies.

Opportunities for Recreation

Classes are scheduled into five week days leaving the weekends free for study and recreation.

The fall semester ends just before Christmas. With examinations over, VCU students can relax and enjoy their Christmas vacations. The second semester examinations end by the middle of May enabling students to seek summer employment.

Major concerts and shows appear regularly in Richmond at the Mosque, a block from the Academic Campus, or at the Richmond Coliseum, a block from the MCV Campus. Bus service connects the two campuses of the university.

Half-a-dozen movie theaters are easily accessible from both campuses.

Student committees select the groups which play at university dances.

A seven million dollar student union building will soon be under construction at the heart of the Academic Campus.

Richmond offers a wealth of parks and trails for biking or hiking. Sixty miles to the west are the Blue Ridge mountains for camping. Closer to Richmond are found many rivers and streams for fishing and canoeing. Ninety miles to the east is Virginia Beach and the Atlantic Ocean.

The cultural and sports facilities of Washington, D.C., are less than two hours to the north, while the quiet charm of Colonial Williamsburg is less than an hour's drive to the southeast.

The VCU athletic program affords opportunities for both men and women to cheer on university teams in NCAA intercollegiate competition and to participate in the extensive intramural programs. Club teams are fielded in football and tennis.

Modern gymnasiums, one on each campus; a 25-yard pool; weight training rooms; tennis, basketball, squash, paddleball, and handball courts are available for recreational use when not being used for instructional purposes.

Opportunities for Leadership

Students are actively involved in university governance procedures. Many departments and schools involve students as voting members of departmental and school committees.

The Council on University Student Affairs, on which students are a majority, considers student life matters for the university and recommends action to the University Assembly.

The student members who participate as equals with the faculty and administrative members of the University Assembly deliberate the policies that affect the quality of student life at VCU.

More than 45 students clubs and honorary service and social fraternities provide "laboratories" for the development of leadership potential.

The campus newspaper the "Commonwealth Times," and AM radio station WJRB, are entirely dependent upon student skills and leadership.

Opportunities for Service

Virginia Commonwealth University provides numerous opportunities for the motivated students to participate in community service programs within the city and surrounding counties.

Education majors are involved from the freshman level with practical experience in the Richmond area public school classrooms.

Musicians in the Department of Music support local and statewide musical activities, including the Richmond Symphony. Music students also present concerts for the community.

Volunteer students tutor disadvantaged students in the Richmond area.

Students in the School of Social Work serve the community through a wide variety of projects.

Foreign language programs are broadcast in German, Spanish, French, and other modern languages over a local Richmond radio station by students enrolled in VCU foreign language classes. Foreign language majors interpret for local businesses and assist police and social agency personnel in interpreting for foreign travelers.

Theatre majors present numerous one-act plays and major productions in the university's theaters.

Theatre students work with penitentiary inmates in operating a drama program at the State Prison.

Art majors exhibit across the state in schools and museums and in business and bank lobbies, as well as in major exhibitions across the country.

Interior design majors have practicums in designing interiors for local institutions, homes, and business firms.

Students projects in various schools support charitable activities and scholarship funds.

Student volunteers are involved in the Offender Aid and Restoration Program at the Richmond City Jail.

Pre-health science career students work as volunteers in programs and clinics related to their career goals.

Tax and investment seminars are held for husbands and wives in facilities near their homes.

Workshops and seminars are held for law enforcement offices across the state.

PURPOSES AND OBJECTIVES OF THE UNIVERSITY

Purposes

Virginia Commonwealth University shall endeavor to provide an educational environment nurturing and stimulating teaching, research, and service. Sensitive to the needs of urban life in the Commonwealth, it will strive to promote the pursuit of knowledge and the dissemination of professional skills.

Objectives:

To identify and anticipate urban problems; to advance experimentation and open-ended attitudes in their solution through appropriate research; and to develop the university as a planning and resource center for urban living.

To commit itself to creative and varied programs of teaching, research, and consultation, contributing to the improvement of the quality of life within urban communities.

To promote and develop programs of continuing and graduate education relevant to contemporary society.

To provide an educational climate which will stimulate in the student a lifelong commitment to learning and service; which will develop competence and motivation to work toward the realization of individual and community potentials; and which will set for the student an example of excellence.

To develop and maintain an environment of educational excellence that will attract and motivate faculty to pursue their work in accordance with the highest educational standards.

To recognize the imaginative power of the arts and humanities in reflecting the problems and aspirations of society and of the human condition; to acknowledge the role of the arts in changing behavior; and to provide opportunities throughout the university and the Commonwealth to maximize their relevance, both individually, in the self-realization of the student, and publicly, in exhibition and performance.

To complement existing institutions of higher learning by providing programs of a uniquely urban character, thus enhancing the educational opportunities of the Commonwealth.

ACCREDITATION

Virginia Commonwealth University is an accredited member of the Southern Association of Colleges and Schools. Individual schools, departments, and programs on the Academic Campus are also accredited by a variety of state and national associations:

The School of the Arts: National Association of Schools of Art
School of Education: Virginia State Department of Education
School of Social Work: Council on Social Work Education
Department of Business Education and Office Administration: National Association of Business Teacher Training Institutions
Department of Chemistry: The American Chemical Society
Department of Music: National Association of Schools of Music
Department of Social Welfare: Council on Welfare Education

HISTORY

Virginia Commonwealth University takes its founding date from the Medical College of Virginia, which was created in 1838 as the medical department of Hampden-Sydney College. MCV became an independent institution in 1854 and a state-supported one in 1860. The first outpatient clinic was established in 1867. A second medical college, the University College of Medicine, opened in 1893, was consolidated with MCV in 1913.

The Academic Campus began as the Richmond School of Social Work and Public Health in 1917. The school opened with 31 students and one full-time teacher and director, Dr. Henry H. Hibbs. In 1925 the school became the Richmond Division of the College of William and Mary. Fourteen years later its name was changed to Richmond Professional Institute of the College of William and Mary (RPI).

In 1953 RPI, previously accredited through connection with the College of William and Mary, was elected to full membership and accredited in its own name by the Southern Association of Colleges and Schools. By act of the General Assembly of 1962, RPI was separated from the College of William and Mary and made an independent state-supported institution.

The 1968 General Assembly approved a recommendation that RPI and MCV merge to form Virginia Commonwealth University. As a result, the new university came into existence on July 1, 1968, as a coeducational, state-supported institution combining a broad range of undergraduate, graduate, and professional programs with one of the largest and most comprehensive medical centers on the east coast.

LIBRARIES AND THEIR RESOURCES

Integral to the VCU life style and the opportunities for learning and self enrichment are the resources of the VCU Libraries. The casual atmosphere and the variety of seating, from one-person private carrels to lounge chairs in public areas, provide a setting conducive to browsing through current magazines as well as completing research projects.

The Virginia Commonwealth University Libraries consist of the James Branch Cabell Library on the Academic Campus and the Tompkins-McCaw Library on the MCV Campus. Both libraries are expanding space and services through major construction projects and will provide a combined capacity of 1,360,000 volumes and seating for over 2,450.

The James Branch Cabell Library, recognizing the diversity in living and working patterns of VCU students, is open from 7:30 a.m. to midnight five

days of the week with shorter hours on the two remaining days. Other features such as a recorded music and plays collection, Audio-Visual Department assistance in film production, book and coat lockers for commuting students, inexpensive and easy-to-use copy machines, group study areas, and typewriter facilities make the James Branch Cabell Library more than just a repository for books, but a resource center truly serving the needs of the student body.

Students in the School of Education will find the University Curriculum Laboratory's children's literature, textbooks, and teacher's guides an indispensable part of their program of studies. The James Branch Cabell Library is also a depository for many United States government documents.

Of particular note is the reference service of the James Branch Cabell Library. Staff members welcome and encourage students to ask those perplexing questions about the difficult-to-find materials which may be needed to successfully complete an assignment or research paper.

Realizing that not all students will be equally acquainted with the resources of the library, the James Branch Cabell Library provides group and individual orientation sessions where students learn the inner-workings of the library so that they will be able to use it in the future to their best satisfaction.

The Tompkins-McCaw Library contains health science material. Complete sets of all major indexes in these fields are part of the reference collection. Trained search analysts are available to help students obtain computer-produced bibliographies on specific biomedical and health-related topics.

ORGANIZATION OF SCHOOLS AND INSTRUCTIONAL DEPARTMENTS

The Academic Campus of Virginia Commonwealth University is organized into schools, departments, and programs. The dean's office of each school provides the general coordination of the academic departments and programs within the school. In addition, though each student is assigned a faculty advisor by the department in which the student is a major; the dean's office affords supplementary advising about career directions, programs of study, and other problems of an academic nature.

ACADEMIC CAMPUS

Schools and Departments

THE SCHOOL OF THE ARTS

Art Foundation Program

Art Education

Department of Art History

Department of Communication Arts and Design

Department of Crafts

Department of Fashion Design

Department of Interior Design

Department of Music

Applied: Brass, Percussion, Strings

Applied: Organ

Applied: Piano

Applied: Voice

Composition and Theory

Music Education

Music History and Literature

Sacred Music

Department of Painting and Printmaking**Department of Photography****Department of Sculpture****Department of Theatre**

Theatre

Theatre Education

SCHOOL OF ARTS AND SCIENCES**Program in Afro-American Studies****Department of Biology****Department of Chemistry****Department of English****Department of Foreign Languages**

French

Department of History and Geography**Interdisciplinary Studies in Humanities and Social Sciences****Department of Mass Communications**

Advertising

Broadcast News

Magazine

News-Editorial

Public Relations

Department of Mathematical Sciences

Applied Mathematics

Computer Science

Mathematics

Statistics

Department of Philosophy and Religious Studies**Department of Physics and Physical Science****Department of Political Science****Department of Psychology**

Behavior Technology

Clinical

Counseling

Experimental Laboratory

Department of Sociology and Anthropology

Archaeology

Criminology-Deviant Behavior

Urban Sociology

Survey Research Center

Pre-Professional Studies in Health Sciences

- Dental Hygiene
- Dentistry
- Medicine
- Medical Technology
- Nursing
- Occupational Therapy
- Pharmacy
- Physical Therapy
- Radiologic Technology
- Veterinary Medicine

Associate in Arts Degree

SCHOOL OF BUSINESS

- Department of Accounting
- Department of Business Administration and Management
- Department of Business Education and Office Administration
 - Business Education
 - Bookkeeping
 - General Office Procedures
 - Stenography
 - Office Administration
 - General Secretarial
 - Legal Secretarial
 - Medical Secretarial
- Department of Economics
- Department of Information Systems
- Department of Marketing
- Management Center

SCHOOL OF COMMUNITY SERVICES

- Department of Administration of Justice and Public Safety
 - Corrections
 - Police Planning
- Department of Recreation
 - Public Recreation
 - Recreation Resource Management
 - Recreation in Special Settings
- Department of Rehabilitation Counseling
- Rehabilitation Services
- Department of Social Welfare
- Department of Urban Studies
- Department of Urban and Regional Planning

SCHOOL OF EDUCATION

- Department of Educational Leadership and Personnel Development
 - Administration and Supervision
 - Counselor Education
- Department of Elementary Education
- Early Childhood Education

Elementary Education
Library Science
Department of Health and Physical Education
 Intramural Athletics
Department of Secondary/Post-Secondary Education
Distributive Education
 Secondary Education
 Biology Education
 Chemistry Education
 English Education
 French Education
 General Science Education
 History/Social Science Education
 Mathematics Education
 Physics Education
Department of Special Education
 Learning Disabilities
 Mentally Retarded

SCHOOL OF SOCIAL WORK

CATEGORIES OF STUDENT ENROLLMENT

Virginia Commonwealth University provides a variety of ways in which a student may pursue a course of studies. For specific information about admission to the various degree-seeking and non-degree seeking statuses, see Part II, the Admissions section, of this bulletin.

Degree-seeking. This student has fulfilled the admission requirements of a particular school and is enrolled in an associate (two-year) or bachelor's (four-year) degree program or a health sciences preparatory program. A degree-seeking student may engage in studies as either a full-time (12 credits or more per semester) or as a part-time (less than 12 credits per semester) student. A degree-seeking student may enroll for day and/or evening classes.

Furthermore, a degree-seeking student may pursue his program of studies in one of the following ways:

1. As a declared departmental major in a school on the Academic Campus. The student who declares a specific major upon entry to VCU will begin a course of studies leading to a degree in the declared major. (The student may change majors at a later date.)
2. As an "Undecided" student with a specific school. For the new student who knows the school of the university into which he wishes admission, but not the specific department, the student may select the "Undecided" category within that particular school. The student will be advised along general academic lines so that he may enroll in those courses which will assist him to more clearly define his academic objectives. The student must define these goals and declare a major area of study no later than the semester in which he will complete his sixty-second credit (two years of study).

3. As a student in the General Studies Program. In recognition that some students seeking admission to Virginia Commonwealth University will not have chosen a departmental major or the school of the Academic Campus in which they wish to study by the time they apply or enroll, the university has provided a general exploratory program of studies. This program is flexible enough to suit the interests of any uncommitted student, yet it is basic to a number of fields of study. During the first year of study the student is encouraged to investigate various fields of study until he finds a major which suits his interests and needs. Students enrolling in the General Studies Program must select a departmental major by the end of two years of study.

Non-Degree Seeking. Students who wish to continue their education at VCU without seeking admission to a degree program may enroll for credit as "Special" students in day and/or evening classes. A non-degree seeking student who takes at least one day class or combination of day and evening classes is known as a "Special Day Student." A non-degree seeking student who takes all classes through the Evening College is known as a "Special Evening Student." (The student should consult the admissions section of this bulletin for exact admission requirements as a "Special Student.")

The "Special Student" may pursue his course work in one of the following categories:

1. As a Non-Degree Holder. This student has not previously earned a baccalaureate degree. The student may take a maximum of 11 credits per semester (part-time) in day or evening courses or a combination of both.
2. As a Degree Holder. This student has previously earned a baccalaureate degree at VCU or another accredited institution and wishes to pursue additional undergraduate course work and may take more than 11 credits per semester (full-time) in day and/or evening classes or a combination of both.
3. As a Transient Student. This is a student who is presently seeking a baccalaureate degree at another institution of higher education and wishes to pursue a course of studies at VCU as a full-time student for no more than two semesters with the intent of transferring this work back to the home institution to complete his degree. This student may take more than 11 credits per semester in day and/or evening classes or a combination of both.
4. As an Auditor. This is a student who wishes to enroll in regular university courses for no credit, on a space available basis. The auditor is not subject to the usual attendance and examination requirements of regular university courses and may enroll for classes equaling more than 11 credits per semester in day and/or evening classes or a combination of both.

DEGREE PROGRAMS

Degree programs at the Academic Campus of Virginia Commonwealth University are offered in the following general levels:

Associate Degrees (generally two-year programs)
 Bachelor's Degree (generally four-year programs)
 Master's Degrees (one- and two-year programs)
 Doctoral Degree

Associate Degree Programs

Two-year degree programs are offered to those students who do not expect to complete a four-year curriculum. The following degree programs lead to the associate degree:

Associate in Arts Degrees:

Arts and Sciences

Associate in Science Degrees:

Information Systems
 General Secretarial

Legal Secretarial
 Medical Secretarial

Bachelor's Degree Programs

Four-year degree programs are offered in each of the areas listed below, leading to the degree indicated:

Bachelor of Arts Degrees:

Chemistry
 English
 French

History
 Philosophy
 Political Science

Bachelor of Fine Arts Degrees:

Art Education
 Art History
 Communication Arts and
 Design
 Crafts

Fashion Design
 Interior Design
 Painting and Printmaking
 Sculpture
 Theatre
 Theatre Education

Bachelor of Music Degrees:

Applied Music
 Composition
 Music History and Literature
 Sacred Music

Theory

Bachelor of Music Education Degree:

Music Education

Bachelor of Science Degrees:

Accounting	Management
Administration of Justice and Public Safety	Marketing
Biology	Mass Communications
Biology Education	Mathematical Sciences
Business Administration	Mathematics Education
Business Education	Office Administration
Chemistry	Physics
Chemistry Education	Physics Education
Distributive Education	Psychology
Economics	Recreation
Elementary Education	Rehabilitation Services
English Education	Retailing
French Education	Science
Health and Physical Education	Science Education
History and Social Science Education	Sociology and Anthropology
Education	Social Welfare
	Special Education
	Urban Studies

Graduate Degrees:

The following graduate degree programs are offered at the Academic Campus of Virginia Commonwealth University. More detailed information is published in the graduate bulletins for each school.

Master of Arts:

Art History
Economics

Master of Business Administration:

Business Administration

Master of Fine Arts:

Crafts	Printmaking
Painting	Sculpture
	Theatre

Master of Art Education:

Art Education

Master of Education:

Administration and Supervision	Special Education
Adult Education	Emotionally Disturbed
Biology Education	Learning Disabilities
Counselor Education	Mentally Retarded
Elementary Education	
Distributive Education	
Mathematics Education	

Master of Music:

Applied Music	Education
Church Music	History
Composition	Theory

Master of Music Education:

Music Education

Master of Science:

Biology	Psychology—Clinical
Business	Rehabilitation Counseling
Chemistry	Sociology
Economics	
Mathematics	
Physical Education	
Psychology—Applied	

Master of Social Work:

Social Work

Master of Urban and Regional Planning:

Urban and Regional Planning

Doctor of Philosophy:

Chemistry
Psychology

PROGRAMS IN PREPARATION FOR PROFESSIONAL STUDY IN THE HEALTH SCIENCES

The School of Arts and Sciences provides programs in preparation for the study of dental hygiene, dentistry, medical technology, medicine, nursing, occupational therapy, pharmacy, physical therapy, veterinary medicine, and radiologic technology.

These preparatory programs, varying from one to four years in length, meet the minimum academic requirements for application to the professional years of many health science programs, including the degree programs offered on the Medical College of Virginia Campus of VCU. Satisfactory admission to and completion of one of the preparatory programs does not constitute admission to the final years of the professional program at MCV.

PROGRAM IN PREPARATION FOR PROFESSIONAL STUDY IN LAW

Both the School of Arts and Sciences and the School of Business provide academic advising for those interested in a career in law.

EVENING COLLEGE

A wide variety of courses is offered in the evening for the benefit of those students who seek to continue their education on a part-time basis and for those full-time students desiring to take part of their course work in the evening. The evening and day programs form a single educational unit with many of the regular full-time faculty members teaching evening courses. Some classes are taught in the evening because the qualified instructors required for these specialized courses are available only in the evening hours. Evening courses carry regular college credit and have the same status as regular day courses. Such courses are usually offered on campus but may be scheduled at more convenient locations within the Richmond metropolitan area.

Although there is no limit placed on the number of credits that may be earned in the Evening College, evening students who wish to earn a degree are encouraged to apply for a degree-seeking status through the director of admissions as soon as possible. A separate bulletin of Evening College offerings is available upon request. Write to the Dean of the Evening College, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284.

SUMMER SESSIONS

A variety of course offerings is available in the summer. There is a six-week session, followed by three- and five-week sessions; a nine-week summer evening session; and for those desiring to earn 12 credits during a summer, several courses are offered on Saturday mornings during a 12-week period from May to the end of August. In 1974 a three-week pre-session was added which made it possible for some students to earn 15 credits. For complete information and bulletins, inquiries should be directed to the Office of Summer Sessions, telephone (804) 770-6731.

CENTER FOR CONTINUING EDUCATION

Continuing education is one of the major purposes of Virginia Commonwealth University. In keeping with this purpose, numerous courses, workshops, institutes, and seminars, ranging from cultural enrichment programs to specific professional topics, are offered by the various schools of the university through the Center for Continuing Education.

Recognizing its responsibilities to the citizens of the Commonwealth, the Center for Continuing Education also provides off-campus credit and on- and off-campus non-credit educational opportunities for employed adults.

Through a contractual agreement, the center, located in the Holiday Inn/ Downtown, 301 West Franklin Street, is about midpoint between the two VCU campuses. The center coordinates the availability and use of guest rooms, dining facilities, and conference space for participants in short programs offered by the various schools and departments in the university.

Many of the offerings of the Center for Continuing Education are announced via supplements to the daily newspapers. In addition, special

courses and programs directed toward certain professional groups are announced by direct mailings to the specific groups.

Further information may be obtained by writing to: Virginia Commonwealth University, Center for Continuing Education, 301 West Franklin Street, Richmond, Virginia 23220.

ADVANCED SCHOLARS PROGRAM

F. DANA PAYNE, Coordinator

Qualified high school seniors from area high schools may be permitted to carry college level courses at the university concurrently while completing the high school diploma. Students are permitted to select those courses of interest and upon successful completion, receive appropriate college credit. The program, available during the academic year and summer, provides the capable high school student an opportunity to (1) experience college courses while still in high school, (2) obtain college level credit, and (3) complete courses frequently not available in a high school curriculum.

Candidates must be nominated and approved by the secondary school. A maximum of 100 candidates will be accepted for each term and candidates may enroll for no more than three courses per term.

As a guide to secondary schools, the following criteria for selection is considered:

1. Each candidate must have completed his junior year.
2. Each candidate must have achieved a total of 1,000 points on the College Entrance Examination Board SAT (100 on the PSAT) or have maintained a "B" average.

Notification forms and other information may be obtained from the Director of Admissions, 901 West Franklin Street, Richmond, Virginia 23284. Telephone (804) 770-7222. After hours, weekends, and holidays, phone (804) 770-7225.

CURRICULUM IN ENGINEERING

C.A.B. FOSTER, Coordinator

For the 1974-1975 session, no freshmen are being admitted to the Curriculum in Engineering and the first-year engineering courses will not be taught.

The second-year courses will be taught for the last time this session and the Curriculum in Engineering will not be available after June 1975.

GENERAL STUDIES PROGRAM

F. DANA PAYNE, Director

RONALD A. TIMMONS, Associate Director

In recognition that some students seeking admission to Virginia Commonwealth University will not have chosen a field of concentration by the

time they apply or enroll, the university has provided a general two-year exploratory program of studies. This program is flexible enough to suit the interests of any uncommitted student, yet it is basic to a number of fields of study. During the year of study the student is encouraged to investigate various fields until he finds a curriculum which suits his interests and needs. The admission requirements for this program are similar to those of the School of Arts and Sciences. However, transfer students from other universities are not admitted to this program.

Students enrolling in the General Studies Program are encouraged to select a major field of concentration by the end of two years of study. A student will not be allowed to register for more than 60 hours as an exploratory student. The major requirement for the General Studies Program is that the student must meet with his advisor once each term before advanced registration to plan his curriculum. The student is also required to schedule an appointment for advising when recommended by his advisor to do so.

SUGGESTED COURSES FOR GENERAL STUDIES STUDENTS AMONG VARIOUS SCHOOLS

A. Most Transferable Courses

English 101-102
History 101, 103, and 201
Psychology 201
Sociology 101
Speech 121
Biology 101-102, Chemistry 101-102, Physics 201-202
Economics 201-202
Mathematics 100 or 113 (placement test required)
Physical Education

B. Second Level of Most Transferable Courses

Political Science 201
Art History 103
Afro-American Studies 100
Philosophy 101 and 102

If School is Probably Arts:

Art 121, 122
Art History 103, 104, 110E, 201, 202
Crafts 201, 202, 211, 212, 241, 242, 261, 262
Fashion Design 209, 212E
Interior Design 211, 212E
Painting and Printmaking 155, 156E
Photography 243, 244
Sculpture 209, 210
Theatre 111, 203, 204

If School is Probably Arts and Sciences:

Cultural Anthropology 103
English 101-102

Foreign Language (placement test required if continuing in high school language)

History 101, 103, or 201

Laboratory Science—two course sequence—Biology 101-102

Chemistry 103-104, Physics 107-108

Mathematics 100 or 113 (replacement test required)

Philosophy 101

Political Science 101, 201

Psychology 201

Religious Studies 101

Sociology 101

If School is Probably Business:

Business 121

English 101-102

History 201

A natural science elective

If School is Probably Community Services:

Biology 101-102 or other lab science

Community Services 115 and 116, Community Services 211-212

English 101-102

Mathematics 113 and Statistics 213

No Physical Education required

Psychology 201

Sociology 101

If School is Probably Education:

English 101-102

History 201

Mathematics 115 (Elementary Education only)

Electives in area you may wish to teach OR Education 300, 301, or 302, Economics 203

Physical Education

Also, student may take beginning courses:

History 101, 102, or 103, 104

Political Science 101

Psychology 201

Sociology 101, 102

Urban Studies (Community Services 115-116)

ADVANCED PLACEMENT

Qualified students who have taken college-level work in secondary schools may receive academic credit and/or advanced placement. Examinations which determine advanced placement are the Advanced Placement Tests of the College Entrance Examination Board; results are forwarded to the Office of Admissions. Final determination of credit will be made after test results have been evaluated by the university.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The university also will award college credit to students who score satisfactorily in the College Level Examination Program (CLEP). A maximum of 24 semester hours for the general examination and a maximum of 30 semester hours for the subject examination may be granted in college equivalency.

Candidates not presently enrolled at VCU who desire information about this examination should write the Director of Admissions, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284. VCU students interested in accelerating their academic program should consult with their advisor and the CLEP Administrator, 914 Park Avenue. VCU is an authorized CLEP testing center.

LEARNING CENTERS

Two learning centers, one on each campus, provide individualized programs of remedial and enrichment instruction for students who are admitted as special students and for regularly admitted students who experience academic difficulties. The modern centers, equipped with the most recent learning aids and materials, feature individualized self-paced, non-credit programs of instruction. University students use the resources of the learning centers much as they use the resources of the university library, by scheduling individual programs during their personal study time. Interested students are invited to visit the Academic Campus Learning Center, located on the corner of Floyd Avenue and Brunswick Street, to examine the facilities and to obtain a "Student Referral Form," which serves as an application to use the center's study programs.

Currently, study programs are available for study habit skills, developmental reading, black history and literature, language arts, drug and sex education, mathematics, citizenship and social studies. These study programs are designed for self-enrichment. They may not substitute for university course work and do not earn university academic credit. Other programs are available upon request.

SENIOR CITIZENS HIGHER EDUCATION PROGRAM

The General Assembly of the Commonwealth of Virginia passed, and the Governor of Virginia signed into law, the "Senior Citizens Higher Education Act of 1974." This bill provides that any legal resident of the state who has reached 65 years of age before the beginning of the term in question may register for certain courses without paying tuition. These courses include **credit** courses for which he registers on an **audit** basis, and **non-credit** courses. Senior citizens who had a taxable income not exceeding \$5,000 for federal income tax purposes for the year preceding the year in which enrollment is sought may take appropriate courses for credit tuition free.

Any senior citizen wishing to avail himself of the benefits of the law may take up to three courses per semester, for which he may register after all tuition-paying students have been accommodated.

For further information about eligibility to use the benefits at VCU and about registration, call the Office of Admissions, 770-7222, for the day program; for the Evening College program, 770-6731, for non-credit classes, the Center for Continuing Education, 770-3746.

SPECIAL SERVICES PROGRAM

Through a grant from the federal government, Virginia Commonwealth University has developed a program designed to attract students from low income areas, in accordance with federal guidelines. Candidates are chosen because of academic potential, not necessarily because of academic performance. Teachers, high school counselors, and persons affiliated with programs such as Upward Bound, Talent Search, Model Neighborhood, and the National Scholarship Fund for Negro Students are encouraged to recommend students to the program.

Special Services provides continuous supportive services, counseling, tutoring, career planning, and cultural enrichment for persons recruited as special service students.

Students interested in the Special Services Program should write to the Office of Admissions, 901 West Franklin Street, or may contact the Special Service Office by telephone: 770-3158, or write to the Director of Special Services, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284.

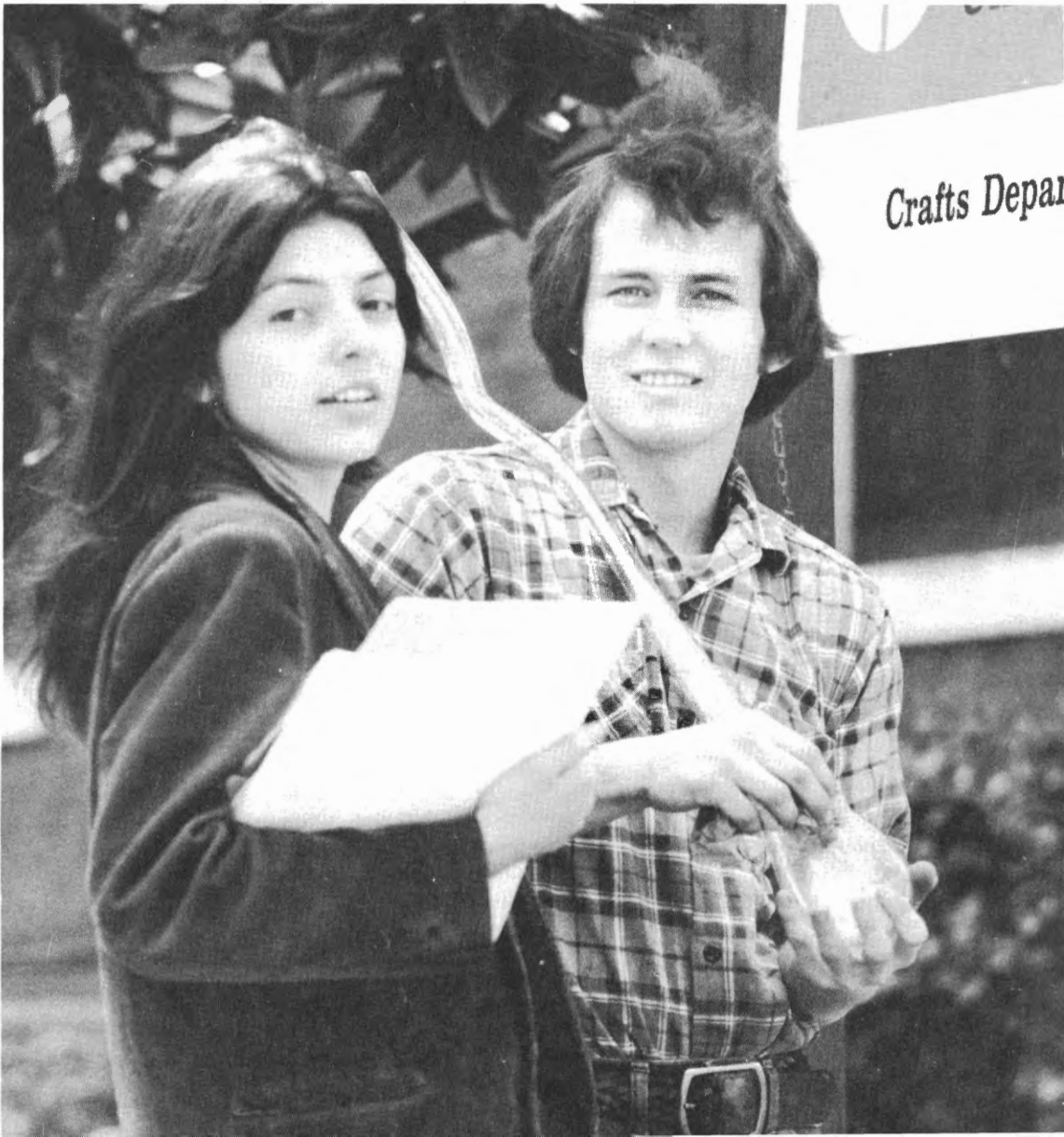
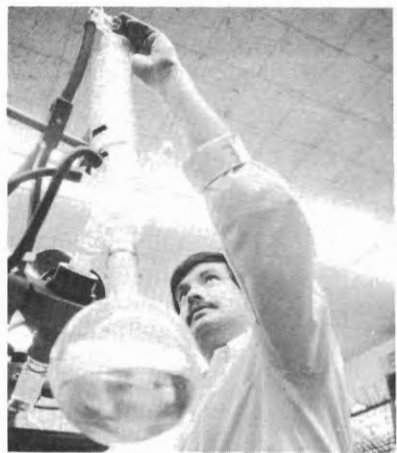
ALUMNI OF THE UNIVERSITY

Alumni of Virginia Commonwealth University are associated to help the university achieve its many goals. Communications between alumni and the university serve to acquaint the alumnus with the university today and to keep him informed of current events. An appeal for financial support for the university and its programs is made each year by the Annual Fund.

Alumni activities are coordinated for the university by the Alumni Activities Office of the Office of Development. Inquiries should be directed to the Director of Alumni Activities, 901 West Franklin Street, Richmond, Virginia 23284, telephone (804) 770-7124.

RIGHTS RESERVED

Virginia Commonwealth University reserves the right to change the information, regulations, requirements, and procedures announced in this bulletin.



PART II—UNDERGRADUATE ADMISSION

The Office of Admissions is eager to assist prospective students. Office personnel are available from 8 a.m. to 4:30 p.m., Monday through Friday, for appointments, disseminating general information, obtaining applications and catalogs, and providing specific information pertaining to the admissions process. Services are extended after regular office hours by a telephone message service.

Undergraduate applications for the Academic Campus are considered on an individual basis. Each application is processed after all required data is received. Applicants accepted will be notified by letter as to the condition under which the university will reserve a place for them. Information on advisement and registration procedures, the medical history form, and housing will be included in the acceptance letter. The university reserves the right to release copies of admission decisions and grade point records of enrolled students for institutional research purposes.

Prospective students and their parents are welcome to visit the campus. If an appointment is desired, it is advisable to write or telephone the Office of Admissions for an appointment. While campus lodging accommodations are not available for guests, commercial motels are located near the campus and guided tours can be arranged with advance notice.

APPLICATION MATERIALS AND BULLETIN

Candidates seeking admission to the university in an undergraduate degree program, as a special day student, or as a readmission candidate, must file an official Application for Admission with the Office of Admissions. Applica-

tions and bulletins are free of charge and may be requested by mail, telephone, or by visiting the office. The mailing address for the Office of Admissions is 901 West Franklin Street, Richmond, Virginia 23284. Telephone (804) 770-7222. After hours, weekends, and holidays, phone (804) 770-7225.

FRESHMAN AND TRANSFER APPLICATION DEADLINES AND FEE

Degree applications for the fall semester beginning in September are accepted as long as space in the candidate's desired program is available. Degree applications for the spring semester beginning in January must be received by December 1. A \$10 non-refundable application fee must accompany an undergraduate application for a degree program.

Applications for transfer students for the spring semester who are enrolled during the fall term in another institution will be cancelled unless an official transcript or grade report is received by January 1.

DOCUMENTS REQUIRED FOR FRESHMAN AND TRANSFER APPLICATIONS

It is the responsibility of the applicant to request that required documents for admission consideration be forwarded to the Office of Admissions. Freshman candidates must request their guidance counselor to forward their secondary school record (grades, rank in class, courses completed). Transfer candidates must request the registrar of all accredited colleges attended to forward official transcripts. Transfer candidates who have attempted less than 30 semester hours (45 quarter hours) must also forward their secondary school record.

When an applicant is accepted to the university, final transcripts are required. If the official final transcript has not been received, the student's enrollment status will be changed from "degree" to "special" and credit hours will be reduced to 11 or less.

TEST DATA REQUIRED FOR FRESHMAN AND TRANSFER APPLICATIONS

All freshman candidates, except those who are 22-years-of-age or older or who hold a GED certificate, are required to submit scores on the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board. The SAT's should be taken no later than the December testing date of the senior year in high school. Transfer candidates who have attempted less than 30 semester hours (45 quarter hours) and are under 22-years-of-age or hold a GED certificate must submit test results from the Scholastic Aptitude Test. The CEEB code number for the Academic Campus is 5570. For information concerning test centers, consult your high school guidance department or write to the College Board Admission Testing Program, Box 592, Princeton, New Jersey 08540.

FRESHMAN ADMISSION REQUIREMENTS

An applicant must be a graduate of an accredited secondary school or hold a GED certificate. A high school candidate should not submit an application until the junior year is completed.

As the number of applicants who meet the requirements for admission exceeds the number that can be admitted, the university selects those students who present: (a) the strongest qualifications in scholastic achievement, aptitude, character, personality and extra-curricular activities; and (b) evidence of aptitude for achievement in the specific field of study for which the applicant applies. Specifically, students are selected on the basis of their (a) high school record (courses of study, grades achieved, overall average, and class rank); (b) Scholastic Aptitude Test results of the College Entrance Examination Board; (c) counselor's recommendation; and (d) evidence of interest and motivation as supplied through related information.

SPECIFIC SCHOOL REQUIREMENTS FOR FRESHMAN CANDIDATES

The School of the Arts

Degree candidates to The School of the Arts will receive an art admission packet designed to measure, in part, the student's ability and aptitude for the arts. The packet will be forwarded to the applicant upon receipt of the application. This document is to be completed at home and will form an important part of the basis upon which an admission evaluation will be judged.

In addition to completing the requested written information in the admission packet, students applying to the music or theatre departments are also required to participate in an audition arranged after the application is received. The audition is arranged by the appropriate department. Applicants to the Department of Music also must show evidence of attaining a technical level in one or more fields of music and take the theory placement examination.

Applicants to the visual arts should not submit a personal portfolio but are required to complete the drawing and design exercises specified in the art admission packet.

School of Arts and Sciences

Students applying to the School of Arts and Sciences must have four units in English, two units in algebra and one-half unit in plane geometry, two units in a foreign language, two units in a laboratory science, and two units in history or political science. Students who are otherwise acceptable, but who are deficient in units of mathematics or foreign languages, may be admitted with the understanding that they will be required to make up these deficiencies without college credit.

School of Business

Students applying to the School of Business must have a minimum of one year of high school algebra. An additional year of college preparatory mathematics is recommended strongly.

School of Community Services

Students applying to the School of Community Services must present four units of English, one unit of algebra, one-half unit of a physical science,

and one unit of history or political science. Students who are otherwise acceptable, but who are deficient in these subjects, may be admitted with the understanding that they will be required to make up these deficiencies without college credit or they must be able to demonstrate competence in the areas of deficiency through examination.

School of Education

Applicants to a program in secondary education (biology, chemistry, English, history, French, mathematics, physics, and science) must meet the admission requirements of the School of Arts and Sciences and will complete lower level requirements in that school before entering the School of Education at the beginning of their junior year. All other education majors (business education, distributive education, elementary education, health and physical education, and special education) will enter the School of Education directly.

General Studies Program

There are no high school unit requirements for this exploratory program. This program is not open to applicants who have attempted 12 semester hours or more in college. Please refer to page 26 for more information on the General Studies Program.

TRANSFER ADMISSION REQUIREMENTS

Transfer candidates are considered for admission provided they present evidence of good-standing at the institution last attended. A cumulative "C" average (2.0 on a 4-point scale) on all hours attempted at all accredited colleges attended is normally expected for admission.

Transfer candidates to The School of the Arts must submit the art admission packet as described on page 34.

Transfer candidates who have attempted less than 30 semester hours (45 quarter hours) must also meet specific requirements for freshmen applicants as described on pages 34 and 35.

Transfer applicants who are ineligible to return to their former institution must wait one year from the effective date of ineligibility before they can be considered for admission to VCU.

EVALUATION OF TRANSFER CREDITS

An evaluation of transferable credits is made by the appropriate school or department after the accepted applicant's final transcript has been received by the Office of Admissions. A copy of the advanced standing is forwarded to the student prior to orientation and registration if time permits.

Acceptable course credits from other institutions will be recorded on the student's permanent record at VCU together with the grades earned if they are applicable toward a degree program. Regardless of the quality of work completed at other institutions, transfer students must maintain

a "C" average in the credits earned toward a degree at VCU. Credits earned at other institutions carrying a grade of "D" generally will not be accepted for transfer. In addition, transfer work from two-year institutions may not be applied to upper division requirements at VCU regardless of equivalent VCU course numbers.

Students accepted from the Virginia Community College System and other two-year institutions who have received an associate in arts or associate in science degree in a university parallel college transfer curriculum generally will qualify for junior status. Exact designation of this status will be determined after an evaluation of acceptable credits is made by the school of the university in which the student enrolls. Up to 50 percent of the total hours required for graduation from VCU may be transferred from two-year institutions, including not more than 50 percent in the major field of study. However, the candidate should realize that more than two additional years may be necessary to complete the degree requirements in certain curricula.

Credits earned in community college occupational or technical programs will be judged on their own merits to determine whether certificate and college-level academic courses can be applied toward VCU degree requirements.

Courses taken on the "pass/fail" or "pass/no pass" systems or courses taken for grades of "Satisfactory" or "Unsatisfactory" which receive earned credits and a "Satisfactory" grade (or comparable passing grade) from the transfer institution will receive equivalent semester credit. Transfer credit graded as "pass/fail" will not be included in the computation for determination of honors or high honors if the student has achieved honors level at VCU.

The final 30 credits required toward the degree must be completed in residence at Virginia Commonwealth University.

VIRGINIA COMMUNITY COLLEGE TRANSFER STUDENTS

Continuous effort is being made by Virginia Commonwealth University to develop clear guidelines for transfers from the Virginia Community College System. Currently each of the community colleges has been supplied with a guideline document from VCU which gives community college counselors and students needed information about specific schools, departments, and programs at VCU.

Students wishing to transfer to VCU should read carefully the "Transfer Admission" section of this catalog and also consult their *community college* counselors regarding the specific information in the VCU Transfer Guidelines for Virginia Community Colleges.

READMISSION TO VCU

A degree-seeking student who fails to register for any given semester or who withdraws during a semester is required to submit an application for readmission to the Office of Admissions in order to become eligible to register for a subsequent term.

READMISSION APPLICATION DEADLINES AND FEE

Applications for readmission may be requested from the Office of Admissions by mail, telephone, or by visiting the office. The mailing address is the Office of Admissions, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284. Telephone (804) 770-7222. After hours, weekends, and holidays, phone (804) 770-7225.

Readmission applications will be accepted for the fall semester as long as space in the candidate's desired program is available. Applications for the spring semester must be received by December 1.

If the former student's studies have been interrupted for two consecutive semesters (fall, spring), the application must be accompanied by a \$10 application fee.

REQUIRED DATA FOR READMISSION

The Office of Admissions will obtain the student's VCU transcript for readmission consideration.

If the readmission applicant has attended one or more colleges since leaving VCU, the applicant must request the registrar of each college attended to send an official transcript to the Office of Admissions. Applications from readmitted students for the spring semester who are enrolled during the fall term in another institution will be cancelled unless an official transcript or grade report is received by January 1.

READMISSION REQUIREMENTS

A student who becomes academically ineligible after the spring semester, attends summer school immediately following suspension and reduces his academic deficiency to 20 quality points or less may return for the fall semester. A readmission application is not necessary under these circumstances.

A student who withdrew in good standing is eligible to return to his degree program. If a new major is desired, the readmission application will be reviewed for a change of major.

A student who is suspended after a fall semester, attends summer school immediately following the suspension but does not reduce his academic deficiency to 20 quality points or less, is eligible for readmission consideration for the fall semester.

A student who is suspended after a spring semester and attends summer school, but fails to establish his eligibility in the summer school, cannot attend during the fall semester but may apply for readmission for the following spring semester.

A student who is academically deficient more than 20 quality points and has been out of school for more than one academic year is eligible for consideration for readmission.

Readmission applicants who wish to change their major from an academic area to The School of the Arts must submit the art admission packet described on page 34.

For further information on readmission policy, please refer to page 68.

SPECIAL DAY ADMISSION

A person who wishes to continue his education without formal admission to a degree program is classified as a "Special Student."

Credits earned by "Special Students" will be recorded in the student's academic file, and although there is no limit placed upon the number of credits that can be taken in this classification, students who wish to eventually earn a baccalaureate degree are encouraged to seek admission to a degree program as early as possible.

A "Special Student" who does not hold a baccalaureate degree may enroll for a maximum of 11 credit hours in one semester. Attendance is on a part-time basis. A "Special Student" who holds a bachelor's degree or is a transient student (transient students are those who are currently enrolled in another institution and have obtained permission from that institution to take courses at VCU) is allowed unlimited undergraduate credit. For transient students, credit is unlimited for one academic year only.

Students who wish to audit day classes should contact the Office of Admissions and those who wish to audit evening classes only should contact the Evening College Office.

SPECIAL DAY APPLICATION

An application for a "Special Student" to take courses in the day, or a combination of day and evening classes, must be submitted through the Office of Admissions. "Special Students" registering for only evening classes register through the Evening College Office. A special day application may be requested from the Office of Admissions by mail, telephone, or by visiting the office. The mailing address for the Office of Admissions is Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284. Telephone (804) 770-7222. After hours, weekends, and holidays, phone (804) 770-7225.

It is highly desirable for special students to apply early; however, those applicants who are unable to apply early may make application for admission as late as the last evening of registration of the semester for which they enroll.

A "Special Student" taking day classes only or a combination of day and evening classes who fails to register for classes in a given semester or withdraws during the semester must submit another Special Day Application to the Office of Admissions before enrolling for day classes.

SPECIAL DAY REQUIREMENTS

The "Special Student" will be allowed two weeks from the date the semester begins to furnish the Office of Admissions or the Evening College with the proper credentials verifying eligibility to attend. If the credentials have not been received by the deadline, the student's courses will be changed to audit status.

The special day applicant should send only the document that indicates his current academic status:

1. High school graduate—a copy of the diploma or a high school transcript certifying graduation.
2. GED holder—test scores or a Virginia Certificate.
3. College student—a complete transcript of the college last attended as a degree-seeking student affirming eligibility to return or certifying graduation.
4. Transient student—a letter from the dean or registrar of your school stating approval to enroll at VCU.

If an applicant has been rejected for regular admission to a degree program, he may not enroll as a Special Day Student for the same semester, but may register in the Evening College.

If the applicant has been suspended from VCU for academic reasons, he must re-establish eligibility for future enrollment in either day or evening classes in accordance with procedures set forth under Part I of the bulletin.

If the applicant has been suspended from another college for academic reasons, he must wait for at least one academic year before making application for admissions as a "Special Student."

If the applicant has been suspended from VCU or another college for disciplinary reason, he must secure the permission of the Office of Student Life before he is eligible to register for classes as a "Special Student."

GENERAL INFORMATION REGARDING SPECIAL STUDENT ATTENDANCE

1. "Special Students" do not have faculty advisors. They make their own class selections.
2. Credit earned at another institution is not transferred to VCU while a student is classified as a "Special Student."
3. Health forms are not required for "Special Students."
4. "Special Students" do not participate in orientation activities.
5. "Special Students" register on a specified day of registration for any class in which vacancies exist.
6. "Special Day Students" are subject to the continuance regulations as stated in the university bulletin.

Please refer to page 21 of Part I for additional information on special students.

ENRICHMENT AND ACCELERATION OPPORTUNITIES

Advanced Scholars Program

Qualified high school seniors from area high schools may be permitted to carry college level courses at the university concurrently while completing the high school diploma. Students are permitted to select those courses of interest and upon successful completion, receive appropriate college credit. The program, available during the academic year and summer, provides the capable high school student an opportunity to (1) experience college courses while still in high school, (2) obtain college level credit, and (3) complete courses frequently not available in a high school curriculum.

Candidates must be nominated and approved by the secondary school. A maximum of 100 candidates will be accepted for each term and candidates may enroll for no more than three courses per term.

As a guide to secondary schools, the following criteria for selection is considered:

1. Each candidate must have completed his junior year
2. Each candidate must have achieved a total of 1,000 points on the College Entrance Examination Board SAT (100 on the PSAT) or have maintained a "B" average.

Notification forms and other information may be obtained from the Director of Admissions, 901 West Franklin Street, Richmond, Virginia 23284, (804) 770-7222. After hours, weekends, and holidays, phone (804) 770-7225.

Advanced Placement Tests/CEEB

Qualified students who have taken college-level work in secondary schools may receive academic credit and/or advanced placement. Examinations which determine advanced placement are the Advanced Placement Tests of the College Entrance Examination Board. Final determination of credit will be made after test results and examination booklets have been evaluated by the university.

College Level Examination Program (CLEP)

The university also will award college credit to students who score satisfactorily in the College Level Examination Program (CLEP). A maximum of 24 semester hours for the general examination and a maximum of 30 semester hours for the subject examination may be granted in college equivalency.

Candidates not presently enrolled at VCU who desire information about this examination should write the Director of Admissions, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284.

VCU students interested in accelerating their academic program should consult with their advisor and the CLEP Administrator, 914 Park Avenue. VCU is an authorized CLEP testing center.

Placement Tests

The university provides testing to place each freshman student and those transfer students who have not begun courses in the appropriate level in mathematics, foreign language, and freshman English if these courses are required in the student's major program. The orientation, advisement, and registration brochure sent to each newly admitted student provides specific information about the curricula requiring these tests.

Second Baccalaureate Degree

Students who wish to earn a second baccalaureate degree at Virginia Commonwealth University after receiving their first bachelor's degree must obtain permission from the Academic Status Committee (ASC) of VCU. A letter of petition should be presented to the dean of the school in which the degree program is offered. If the petition is presented and approved, an application for admission should be submitted to the Office of Admissions.

EVENING COLLEGE/SUMMER SESSIONS ADMISSION

Evening College/Summer Sessions information may be requested by mail, telephone, or by visiting the office. The mailing address is Dean of the Evening College/Summer Sessions, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284. Telephone (804) 770-6731.

Please refer to page 25 of Part I for Evening College/Summer Sessions information.

GRADUATE SCHOOL ADMISSION

A graduate bulletin describing requirements and procedures for admission to graduate programs will be sent upon request. Address inquiries to the Director of Graduate Studies for the school that sponsors the program desired. The mailing address is Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia, 23284.

The School of the Arts—Graduate programs in art, music, and theatre
Dr. William Stewart

School of Arts and Sciences—Graduate programs in biology, chemistry, mathematical sciences, psychology, and sociology
Dr. Paul Minton

School of Business—Graduate programs in business and economics
Mr. Robert Sheffield

School of Community Services—Graduate programs in rehabilitation counseling and urban and regional planning

Rehabilitation Counseling
Dr. Richard Hardy

Urban and Regional Planning
Dr. David Ames

School of Education—Graduate programs in administration and supervision, counselor, distributive, elementary, physical education, and special education

Dr. Frances Briggs

Department of Occupational Therapy

Mr. Cornelius Kooiman

School of Social Work

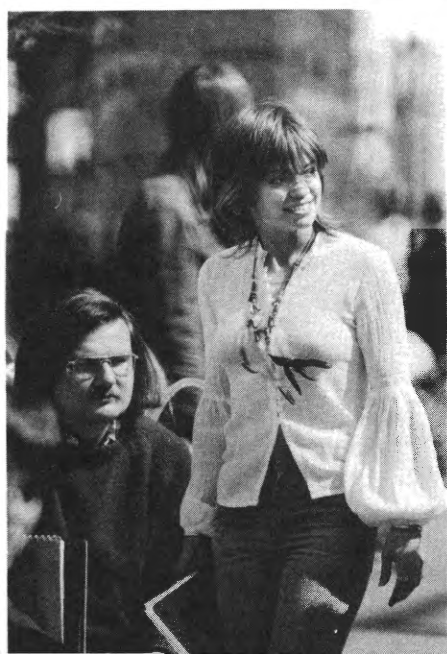
Mrs. Elaine Rothenburg

MCV CAMPUS ADMISSION

Students who have completed the necessary college prerequisites for the health-related professional programs offered on the MCV Campus should request application materials from the Office of Admissions, Medical College of Virginia, Virginia Commonwealth University, MCV Station, Box 163, Richmond, Virginia 23298. Students interested in the School of Medicine should write Box 636.

EFFECTIVE BULLETIN

The student entering a degree program as a freshman, transfer, readmitted, or "change of major" student completes his degree program as listed in the Bulletin effective at the time of entering or re-entering the program in which he seeks his degree. Students with difficulty under this provision should contact the dean of the school in which the program is offered.



PART III—EXPENSES AND FINANCIAL AID

A. FEES AND EXPENSES

It is expected that students shall pay all applicable fees enumerated in this section prior to registration for each semester. Students are reminded, however, that the university reserves the right to revise or alter all fees, regulations pertaining to student fees, and fee collection procedures whenever such revisions or alterations are deemed necessary.

APPLICATION FEE AND DEPOSITS

Application Fee: Each student applying for admission or readmission to the university shall pay a \$10 non-refundable fee. This fee shall accompany the application form sent to the Office of Admissions.

Dormitory Deposit: A \$50 dormitory deposit is also required upon receipt of official notification of acceptance. See page 49, Security Deposit and Damage Fee section.

TUITION CHARGES PER STUDENT

Undergraduate Full-time:

Virginia Resident

\$600 (per academic year)

Non-Resident of Virginia

\$1,250 (per academic year)

The tuition shown is for the academic year 1974-75. Educational costs are subject to similar price adjustments found in the costs of other commodities; therefore, fees may be changed for the academic year 1975-76.

(**Note:** The above tuition charges apply to all full-time students. Full-time students are those students who are enrolled for 12 or more credits in a given semester. An academic year includes two semesters.)

Definition of Virginia Resident: Section 23-7 of the Code of Virginia states: "No person shall be entitled to the admission privileges, or the reduced tuition charges, or any other privileges accorded by law only to residents or citizens of Virginia, in the State institutions of higher learning unless such person has been * domiciled in, and is and has been an actual bona fide * resident of Virginia for a period of at least one year prior to * the commencement of the term, semester or quarter for which any such privilege or reduced tuition charge is sought, provided that the governing board of such institutions may require longer periods of residence and may set up additional requirements for admitting students."

Note: Students desiring a change of their residency status from out-of-state to in-state for tuition purposes must go to the Office of the University Registrar and formally apply for a change. Residency decisions will be rendered for the semester in which the application is submitted. Applications must be received prior to the ninth week of classes to be effective for that semester.

Undergraduate Part-time: Part-time undergraduate Virginia resident students shall be charged \$25 per semester credit in day and evening classes.

Part-time undergraduate non-residents shall be charged \$53 per semester credit in day and evening classes.

Graduate Full-time and Part-time: All fees pertaining to graduate students are listed in the graduate bulletins.

SPECIAL CHARGES

Because of specialized programs, various schools and departments charge each student additional fees to cover special materials, equipment breakage, etc.

The following minimum semester fees are charged for those students registering in the specified courses:

The School of the Arts:

\$25 per semester charge to arts majors.

All full-time majors enrolled in The School of the Arts are charged a comprehensive fee of \$25 each semester. Part-time art majors are charged \$12. Non-art majors enrolled in any of the numerous courses which require an additional outlay for materials will be billed for those individual fees by the business office.

Music—Private lessons. Refer to page 85.

For students enrolled in the Division of Design and the Division of Fine Arts there is a \$5 sustaining supplement charged for each studio course.

Numerous courses require an additional outlay for materials, and such fees are collected within the departments.

The fee for undergraduate credit by examination is \$5 per credit.

Department of Chemistry: Each student is charged for breakage incurred. Regular safety glasses are required. Failure to check out of laboratory, upon withdrawal or for other reasons, will incur a charge of \$5 billed from the Office of Student Accounts.

School of Community Services: A laboratory fee will be charged in the following classes: CSE 241—\$10, CSE 242—\$10, REC 331—\$15, REC 332—\$15, URS 201—\$15.

School of Education: 407—\$8 fee.

Non-recurring Fees (undergraduate)

Application Fee	\$10
Graduation Fee	
(includes diploma and use of cap and gown during the senior year.)	
Bachelor's degree	14
Associate degree	12
Late Registration Fee	10
Room Change Fee	5
Transcript Fee	2 each (after two free copies)
Excess Credits Fee	
(Students enrolled for more than 19 credits per semester. Courses taken on an "audit" or "non-credit" basis will have an equivalent charge as those taken for credit.)	
Virginia Resident	25 per semester credit
Non-Virginia Resident	53 per semester credit
Identification Card Replacement Fee	3

Student Activities Fee: All full-time undergraduate students shall be required to pay a comprehensive fee covering student activities scheduled throughout the school year (concerts, plays, athletic events, etc.). The comprehensive fee shall be \$18 per semester.

All undergraduate part-time day students (those carrying seven through 11 credits) shall be required to pay a \$7.50 per semester comprehensive student activity fee.

PAYMENT OF TUITION AND SPECIAL FEES

Tuition is payable by the semester as follows:

	Virginia Resident	Non-Virginia Resident
First Semester—by		
July 31	\$300	\$ 625
Second Semester—by		
December 15	300	625
TOTAL TUITION PER ACADEMIC YEAR	\$600	\$1,250

FEES FOR RESIDENCE HALL STUDENTS

The charges for matriculation, tuition, and other instructional services are the same for commuting students. Other charges for residence hall students for the academic year:

Room Rent

Rhoads Hall	\$630
Johnson Hall	600
Other Residence Halls	580
Room Deposit and Damage Fee	50
Laundry Fee (required of all residence hall students)	30
Infirmary Fee	52
Board Fee	
21 meals-per-week (required of all freshmen residence hall students)	620
15 meals-per-week	590
<i>A la carte</i> cafeteria (approximately)	690
(The meal plans are described more fully in the section below)	

ROOM AND BOARD FEES

Room Rent: When a student receives his or her acceptance letter, also enclosed is a room reservation card. If residence hall space is required, the student fills out the card and returns it with \$50 deposit. The student is notified of his or her placement in a residence hall or of being placed on a waiting list for residence hall space.

Room rent is payable at the time tuition and other fees are due. Rooms in residence halls are rented for the entire academic year of nine months. Exceptions may be made for students who complete their course of study at the end of the first semester. Only one semester room rent is due prior to each semester.

No refund or rebate of room deposits is made for any cause after the dates for closing room reservations; subletting is not permitted.

Board: All freshman and sophomore students who live in university residence halls are required to take their meals in the university dining facilities.

Freshman students living in university halls are required to subscribe to the full 21 meal-per-week plan. The cost for this plan is \$620 for the academic year.

Sophomore students have the option of subscribing to either the 21 or 15 meal-per-week plan. The 15 meal-per-week plan provides for a student to take any 15 meals during scheduled meal hours in a given week. The cost for this plan is \$590 for the academic year.

Cafeteria: Students living off-campus and other residents not required to subscribe to the university board plan may subscribe to a 21 or a 15 meal-per-week plan to the extent that space is available. Students who choose not to subscribe to either food plan may use the cafeteria on a pay as you go basis.

Summary of semester charges for residence hall students using the full-board plan (in addition to application fee and room deposit):

Tuition	\$300
Room Fee (minimum)	290
Meals (minimum)	295
Laundry Fee	15
Infirmary Fee	26
Student Activity Fee	18
	<hr/>
	\$944

The \$944 is due July 31 for the fall semester and December 15 for the spring semester.

Summary of semester charges for residence hall students not on the full-board plan (in addition to application fee and room deposit):

Tuition Fee	\$300
Room Fee (minimum)	290
Laundry Fee	15
Infirmary Fee	26
Student Activity Fee	18
	<hr/>
	\$649

The \$649 is due July 31 for the fall semester and December 15 for the spring semester.

Contracts for room and board (except in cases involving contracts initiated during the spring and summer terms) are for a two-semester period. If a resident voluntarily withdraws from the university residence halls without clearance from the Office of the Dean of the Student Services but remains at the university, he will be responsible for full room and board fees. Subletting is not permitted.

Exceptions to the above policy can be made only by the Office of the Dean of Student Services.

INCIDENTAL EXPENSES

It should be stressed that a student will incur at college not only those expenses for which he is billed by the school, but will, in addition, pay for clothing, books, supplies, travel, and many out-of-pocket expenses.

A student should therefore plan to make allowances for such expenses in figuring the cost of each year at the university.

INSURANCE

The university is not responsible for accidents occurring to students in connection with class, laboratory, shop, field work, athletics, student activities, travel, or other activities. However, the university offers to its students approved insurance providing substantial benefits at group rates. The insurance extends for a 12-month period beginning September 1, or from the beginning of second semester to the next September 1, and includes coverage for accidents, and hospital, medical, surgical and other benefits for illnesses. Married students may wish to enroll their spouse and children. The insurance is written through North America Assurance Society. The university recommends but does not require that all students enroll in the approved Student Group Insurance. All students are required at or before registration to complete a card stating that they do or do not wish to participate in the group insurance plans. For further information, contact the Treasurer, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284.

Insurance to cover students participating in certain intercollegiate sports is arranged through the Athletic Department.

A small comprehensive fire, water, and theft insurance policy on student property is recommended, as the university is not responsible for losses due to fire or theft or water damage.

SECURITY DEPOSIT AND DAMAGE FEE

A Security Deposit and Damage Fee of \$50 will be required of each student completing an agreement for residence hall accommodations. This fee is not applicable to the room and board charges but remains on deposit to be applied toward possible room damage. As such, the fee shall be returned minus any damage charges, according to the following conditions:

1. If application for room is canceled in the Office of the Director of Housing within the time limits specified in residence hall contract.
2. When a student at the termination of his contract severs his connection with the university or the residence hall provided he is not required by university regulation to reside in university residence halls.

A resident forfeits his Security Deposit and Damage Fee if he withdraws for any reason from the university residence halls before the termination of his contract.

REFUNDS

A full- or part-time day student who withdraws in good standing shall be entitled to a refund of a portion of his tuition, room, and board fees for the semester in which he is currently enrolled. All other fees are non-refundable.

Request for Refund: A request for a refund shall be made in writing to the Dean of Student Services before said request can be considered. The following policy governs the refund of room, board, and tuition fees:

1. A student who fails to register or is denied permission to register will be entitled to a full refund of tuition, room, and board if paid in advance.
2. A student will be entitled to a refund of 80 percent of his room, board, and tuition fees upon withdrawal before the end of the first week of the term (seven consecutive calendar days beginning with first day of classes) and a decrease of 20 percent each week thereafter up to and including the fourth calendar week. NO AMOUNT WILL BE REFUNDED FOR WITHDRAWAL AFTER THE FOURTH CONSECUTIVE CALENDAR WEEK OF THE TERM.
3. A student will not be entitled to a refund of room fees if he voluntarily withdraws from the university residence halls but remains registered for any course or courses at the university unless clearance is granted through the Office of the Dean of Student Services.

The actual date of withdrawal will be certified by the Office of the University Registrar; and refund, when appropriate, will be computed based on that certified date.

DELINQUENT ACCOUNTS

The university will not issue a degree, transcript of grades, or grade reports to any student who has not paid all charges in full. Students whose accounts are not paid in full may not be admitted to final examinations at the end of semesters.

A waiver is placed on accounts that reflect a balance due of \$5 or less and for unpaid accounts that are supported by a scholarship authorization on file in the Office of Student Accounts.

Dishonored Checks:

A student, parent, or guardian who presents a check for payment of tuition and fees to Virginia Commonwealth University, and has the check returned for any reason by the bank as an uncollected item, will have 10 calendar days from the date of notification by the Office of Student Accounts to clear the check. If not cleared within this period, the student will be automatically suspended and may not attend classes until he has been officially reinstated by the Business Office. A charge of \$5 will be levied against the maker of all dishonored checks with the exception of those for tuition. A \$10 fee will be levied against the maker of a dishonored check for tuition.

After two weeks from the date of suspension, a student suspended because of a dishonored check may not be reinstated for the semester. Applications for reinstatement are to be made at the Office of the University Registrar.

Payment of Fees:

A student who fails to meet payments when due will be automatically suspended and may not attend classes until he has been officially reinstated and has paid all accrued fees, plus a \$10 late payment charge. After two weeks from the date of suspension, a student suspended for failure to meet payments when due may not be reinstated for the semester. Applications for reinstatement are to be made at the Office of the University Registrar.

B. FINANCIAL ASSISTANCE TO STUDENTS

The university maintains a Financial Aid Office which offers financial assistance, when possible, to deserving and qualified students in an effort to help these students overcome financial obstacles relative to the attainment of a degree.

INSTALLMENT PAYMENT OF FEES

The university does not offer a financial aid plan for direct payment of semester charges on an installment basis. For those parents who wish to pay college costs in installments, the university recommends application to the Tuition Plan, Inc. or your local bank. The plan makes money available only for those expenses for which a student is billed by the university.

A descriptive brochure on the plan may be secured from The Tuition Plan, Concord, New Hampshire 03301.

APPLICATION FOR AID

The Financial Aid Office provides an application that pertains to all financial assistance offered by the university with the exception of departmental scholarships, grants, and assistantships which must be applied for directly through the respective departments involved. Students may request the mailing of an aid application by writing in care of this office. An indication should be made as to the marital status of the applicant.

UNIVERSITY SCHOLARSHIPS

In determining a student's financial need for scholarship assistance, Virginia Commonwealth University utilizes the College Scholarship Service. Freshmen and upperclassmen must submit different forms to different places, as indicated below:

	Form Used	Where Obtained	Where Returned
Freshman	Freshman Parents Confidential Statement	High School Counselor or Financial Aid Office Virginia Commonwealth University 901 W. Franklin Street Richmond, Va. 23284	College Scholarship Service (see address on form.) Mail by December 1.

Upperclassman	Renewal	Financial Aid Office	Same as above
	Parents	Virginia Commonwealth	
	Confidential	University	
	Statement	901 W. Franklin Street	
		Richmond, Va. 23284	

Scholarship Aid Available: The following scholarships are available at the university to be granted to deserving and qualified students:

President's Scholarships. President's scholarships are awarded to the rising sophomore, junior, and senior who have achieved the highest grade point averages in the university. These scholarships are awarded solely on the basis of academic average, with no regard to financial need.

Undergraduate Scholarships for Virginia Residents. These scholarships are awarded to undergraduate students who are residents of the Commonwealth of Virginia and who demonstrate financial need and academic promise. Inquiries should be directed to the Financial Aid Office.

Departmental Scholarships. Several schools and departments have limited scholarships restricted to students enrolled in that particular school or department. Inquiries should be directed to the head of the school or department concerned.

STUDENT LOAN FUNDS

National Defense Loans. Under the National Defense Student Loan Program, as provided for by the National Defense Education Act of 1958, amended, a needy and capable undergraduate student may borrow funds to cover cost directly related to college charges for which the university bills him. Any full- or half-time student (half-time must carry at least eight credit hours) or prospective student who has been formally accepted for enrollment in a degree program or who is enrolled in such a program may apply for a loan. Contact the Financial Aid Office for details of loan application procedures, interest accumulated, and method of repayment.

Federal Guaranteed Loans. Under the Higher Education Act of 1965, a student can obtain a loan to complete his college education. A student may apply for one of these loans through a participating commercial bank located in the state in which he resides. A brochure describing the program and a list of participating banks may be obtained from the State Educational Assistance Authority, 1116 United Virginia Bank Building, Richmond, Virginia 23219 or from the university Financial Aid Office.

Cuban Loan Program. This program provides for loans under terms similar to the terms of the National Defense Loan Program, for Cuban students who, because of current political conditions in Cuba, are unable to obtain funds. Interested students who qualify should write the Financial Aid Office for applications and information.

Johnson Memorial Loan Fund. These loans are available in limited amounts. The fund is maintained by donations from friends of the university. Inquiries should be directed to the Financial Aid Office.

Departmental Loans. Several schools and departments have limited loans restricted to students enrolled in that particular school or department. Inquiries should be directed to the head of the school or department concerned.

OTHER FINANCIAL AIDS

Educational Opportunity Grants. As provided for under the Higher Education Act of 1965, educational opportunity grants are non-repayable and are available for exceptionally needy students who, but for one of these grants, would not be able to attend college. Proposed chiefly for incoming freshmen, additional awards may be made for past expression of academic success. Awarded to undergraduates only, these grants are restricted by law to those students who are receiving, in the estimation of the Scholarship and Loan Committee, sufficient and reasonable help from parents and grants must be equally matched with a scholarship loan or job.

Work-Study Jobs. Many students will be offered the opportunity to work in "work-study" jobs. These jobs may be on-and off-campus. The jobs consume a maximum of 15 hours per week. Ordinarily a student who is awarded a work-study job will be assigned to a particular department prior to his arrival on campus. Some few students with particular skills may not be assigned until arrival on campus.

Returning students and students accepted for fall enrollment may participate in the College Work-Study Program on a full-time basis during the summer months. Those students desiring employment 40 hours per week during the summer should not plan to attend summer school as a day or evening student. Graduate and undergraduate students may participate in this program if eligible.

It is most important that a student who is awarded a work-study job on campus understands that he will receive this portion of his aid in bi-weekly installments. A work-study recipient, therefore, should use his work-study earnings for such expenses as books, supplies, clothing, and other regularly recurring expenses. Work study earnings are not credited directly to tuition, room, or board. Applications must be filed with the Financial Aid Office for consideration.

Law Enforcement Grants and Loans. A limited number of grants are awarded to students working toward improving their skills and knowledge under the law enforcement program while working for an accredited law-enforcement agency. Loans are available for full-time students. Applications must be filed at the Financial Aid Office.

Part-time Employment. A number of jobs other than those described above are available on campus to any student. Students who desire only a part-time job and no other financial aid should request an application for part-time employment from the Financial Aid Office.

Other Aid Sources. Many churches, fraternal organizations, civic groups, and businesses offer aid to students. As this aid is often not widely publicized, interested students should investigate possibilities in their own communities, states, and regions.

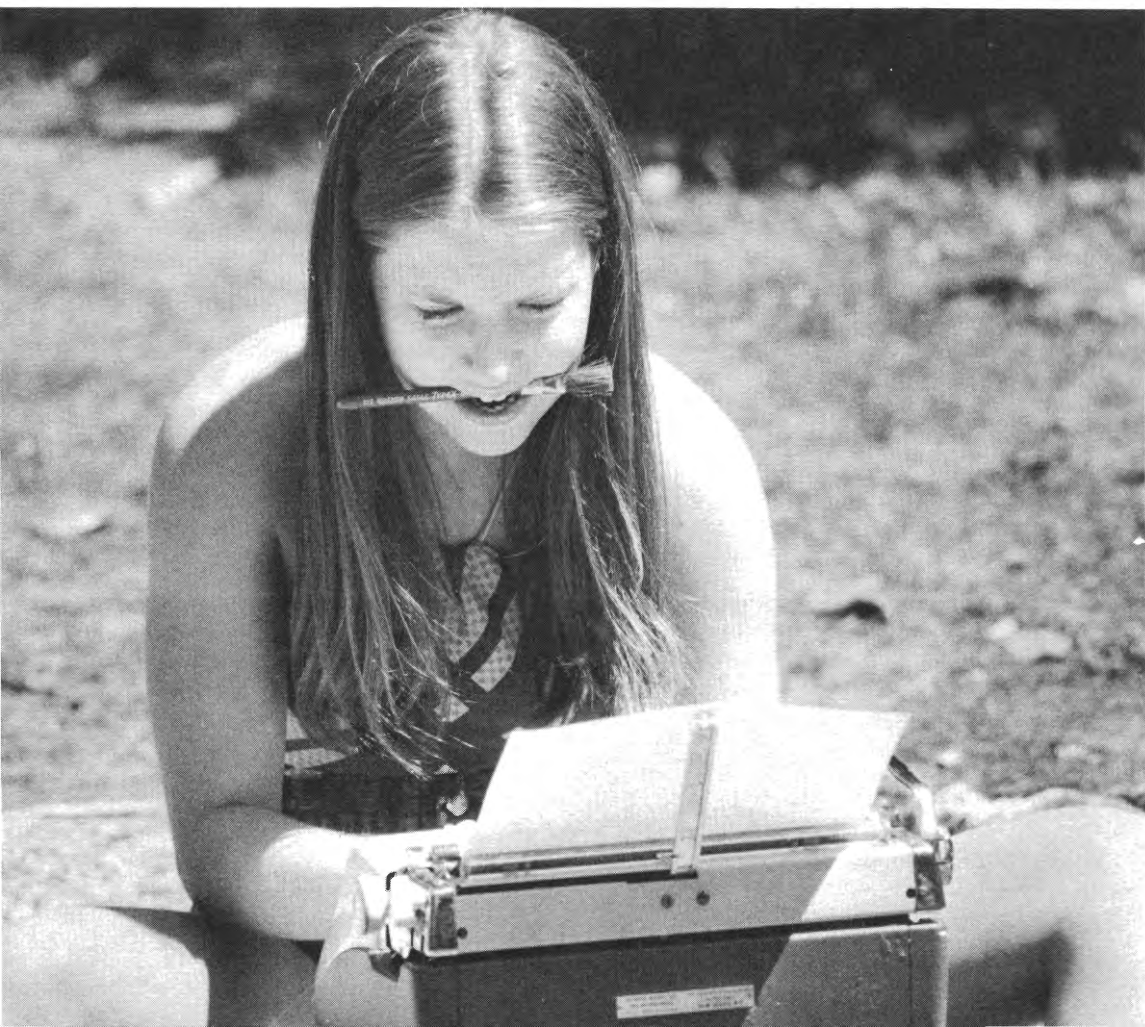
Graduate Students. Besides the financial aid mentioned above, graduate students enrolled in certain schools or departments (e.g., School of Social Work, Department of Rehabilitation Counseling) may be eligible for scholarships, loans or assistantships. The specific school or department should be contacted regarding this aid.

GENERAL COMMENTS

Information and applications on financial aid may be obtained from the Financial Aid Office, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284. All applications should be returned as soon as possible in order to give each student the benefit of sound financial counseling.

Deadlines by which applications for financial aid should be submitted (both by currently enrolled students and by new students) and dates for availability of applications are indicated below:

Financial Aid to Cover	Application Available	Date of Return
September-June	October 15	April 15
February-June	October 15	December 1
Summer Session	April 1	April 30



PART IV—STUDENT LIFE AND SERVICES

People learn as whole beings from total environments. The total university experience permeates throughout an individual's life, and all aspects of living in a university community are learning experiences. The Offices of Student Life and Student Services are deeply concerned both with the learning that occurs in classrooms and laboratories and with the learning that results from all the other experiences of membership in a university community. Our broad range of programs and services results from serious efforts to supplement, complement, and diversify educative and developmental experiences on the campus. These functions vary in formality, content, and setting, and are usually student centered. They are also designed to promote the broadest possible development of excellence and integrity in both the individual and the university as a societal institution.

The Offices of Student Life and Student Services have three major areas of responsibilities: administration, student services, and student development. The administrative responsibilities are those functions necessary to the operation of the university. Student services are those functions that assist or aid the student in attainment of his education. Student development includes the functions of attempting to provide for opportunities and environment that enable students to make the most of their inherent potentialities.

ORIENTATION

To afford each new freshman student the best possible opportunity to make his association with the university most fruitful, the university provides a Summer Orientation Advisement and Registration Program (SOAR). It is

to the student's advantage to take part in this program that utilizes small group processes over a one-and-one-half day period, allowing for individual attention to the student's needs. The program is designed to increase the student's awareness of the university's programs, services, and facilities and thus increase his ability to utilize these facets for his greatest benefit.

Additionally during this period the student is advised and registered for his first semester of classes.

Included in the SOAR program is a program for the parents that is especially helpful for the parents' understanding of the university and its future relationship to their son or daughter.

Although there are fall and spring orientations held, it is to the advantage of the freshman entering in the fall semester to attend SOAR. The university can only serve those who take advantage of the programs that are presented for their participation.

After acceptance to the university, the student will be sent detailed information for his attendance in the SOAR program. Generally SOAR material is mailed in late spring. The student should complete and return any materials requested within the time allotted so that he will not lose his opportunity to attend Summer Orientation Advisement and Registration.

Prior to the opening of each semester there is an orientation program designed for late-admitted freshman and transfer students. Transfer students are urged to take advantage of this program to insure their proper advisement and registration.

STUDENT SERVICES

Student Housing

Living accommodations on-campus are provided for the convenient housing of students and to further the educational objectives of the university. The conditions under which students work and live affect their habits of conduct, patterns of thought, and values in later professional and private life. On-campus housing facilities provide a diversity of physical structures to help meet the housing needs of students. Approximately 2,500 students live in university residence halls which vary in capacity from 20 to 700 and in style from old homes to modern, high-rise residence halls. All freshman men and women under 21 years-of-age are required to live in university residence halls unless they are living with their parents or legal guardian.

Essentially each student is expected to regulate his own life in accordance with reasonable standards of sound judgment and good taste. The university does not attempt to define sound judgment or good taste precisely; rather a few regulations are made and a special effort is exerted to give full consideration to unique personal circumstances when individual problems arise. As a matter of philosophy, the established policies for control of this important aspect of campus life seek to emphasize the welfare of the student rather than rigid control.

Since on-campus residence hall accommodations are limited, acceptance for admission to the university does not guarantee housing facilities to the new student. Students who fall under the residence requirement as outlined above may be placed on a waiting list until space becomes available. Requests for exceptions to the residence rule should be submitted in writing on a form obtained from the Office of Student Services. Rooms in the residence halls are rented for the entire academic year of nine months unless other arrangements are made. The student, or the parent or guardian, contracts to pay the rent for this period. Assignment to space in university residence halls does not guarantee the occupant that housing will be available to him for his entire tenure at the university.

All rooms are adequately furnished, but some students may wish to add personal touches and conveniences of their own. As the buildings vary in age and occupancy, it is best to wait until arrival to decide on the extra furnishings. Students should provide their own pillows, bedspreads, and blankets. Towels and bed linens are furnished weekly. Coin-operated washers and dryers are located in each building.

The university does not control or monitor off-campus housing facilities. Good quality apartments and rooms are not unlimited, and interested students should make arrangements early. It is also advisable for the student to personally inspect off-campus accommodations before contracting. Classified sections of the Richmond newspapers are often helpful in locating nearby available housing.

Food Service

All freshmen and sophomores living in residence halls are required to participate in the university board plan for meals unless specifically excused by the dean of student services after written appeal. The cafeteria is open to commuter students for all meals on a contract or individual basis. Other eating facilities are available in the general area.

Freshmen are required to subscribe to the full 21 meals-per-week plan. Upperclassmen may choose the 21 or 15 meals-per-week plan.

Health Service

The University Health Service on the Academic Campus is available to all students in emergencies, and the full health service is available to all who pay the University Health Service fee. All students living in residence halls are required to subscribe to the health service, and non-resident students are allowed to register for the health service. The health service maintains an infirmary with 24-hour nursing care, provides doctors' office hours each morning, and utilizes an excellent referral system to the medical community.

Counseling Service

The purpose of the Counseling Center at Virginia Commonwealth University is to counsel any student desiring vocational, academic, or personal

help. The Counseling Center's objective is to promote self-understanding and self-direction for the individual student by giving the student the opportunity to see realistically his abilities, capabilities, interests, and needs in his social and academic surroundings. The Counseling Center will, when appropriate, refer students to other agencies.

CAREER PLANNING AND PLACEMENT

While the primary function of the Office of Career Planning and Placement is to assist graduating seniors and graduate students to find gainful employment, this office is engaged in a number of other services.

For graduating students, both undergraduate and graduate, the placement office provides on-campus recruiting for positions in business, industry, education, and government, along with information on resumes, interviewing techniques, salaries, and much more. Opportunities for full-time employment are also received by the placement office from local, state, and national business firms, educational institutions, and government at all levels. All graduating students prepare a credential file which contains professional, academic, and personal references. The credential file can also be used to store professional and academic references as one progresses in his professional career.

Career counseling is available to all undergraduates, graduate students, and alumni. This service is extremely valuable to those deciding upon a career direction, college major, and career change. Freshman and transfer students are encouraged to visit the Office of Career Planning and Placement early in their college experience. A career library is also available to interested students.

For past VCU graduates, the placement office provides an alumni placement service. Please contact the director for further information and registration materials.

STUDENT ACTIVITIES

One of the advantages of being a member of a university community is that students and faculty members are surrounded by countless opportunities for self-development and expression, not only in the classrooms but outside, in the evenings, and on weekends. The university has excellent programs in music, art, and drama. It engages visiting scholars who lecture on special areas of interest within academic fields. The Lecture Committee sponsors several speakers for the Convocation Series. The Concert Committee sponsors many of the popular concerts and dances on the campus. Additionally the Richmond metropolitan area provides a wide variety of cultural and recreational opportunities.

ORGANIZATIONS

More than 80 student clubs and organizations exist on the Academic Campus, reflecting the social, recreational, educational, political, or re-

ligious interests of the student body. Various types of organizations include fraternities and sororities, departmental professional and interest groups, service-oriented groups, and numerous special interest organizations representing a wide variety of activities and interests.

A list of registered student organizations, policies affecting these groups, and information and materials necessary to form new organizations are available in the Office of Student Life.

STUDENT MEDIA

Commonwealth Times. Students write and edit **The Commonwealth Times**, a campus newspaper. In its pages are found campus news, letters to the editor, and editorials and news items covering timely topics.

Cobblestone. The Academic Campus' yearbook, published annually by a student staff, is partially supported by the student activities fee.

WJRB. The student-operated radio station uses a carrier current line to all the residence halls and cafeterias. Station facilities are located in the basement of the Student Center at 916 West Franklin Street.

Spectrum. A student literary magazine offering opportunities for creative writing is published from time to time.

INTERCOLLEGIATE ATHLETICS AND INTRAMURAL SPORTS

CHARLES W. NOE, Athletic Director

All undergraduate students at Virginia Commonwealth University are eligible to compete in these sports subject to rules and regulations governing intercollegiate competition. Freshmen and varsity athletes are not excused from required physical education and cannot meet their department requirements by being members of a varsity team. Varsity athletes who are members of a physical education class involving the same activity as the varsity sport are excused from the class during that portion of the unit.

The coaching of the respective intercollegiate teams is done by the following individuals: baseball, Edward Allen; basketball, Charles Noe; women's hockey, Beth Royster; golf, Buck Jones; gymnastics, Jude Pennington; tennis, David Magill; women's tennis, Charlotte Birindelli; swimming, Jack Schlitz; wrestling, Ernie Venturino; crew, D. K. Waybright; cross country, staff; women's basketball, Charlotte Birindelli.

Intramural sports are designed to offer every student the opportunity to participate in some type of competitive physical activities. The department strives to offer a variety of activities to interest everyone. If enough students show interest in a sport not offered the department will make it part of the program. Sports recently offered are tennis, handball, squash, flag football, table tennis, basketball, paddleball, free throw, badminton, volleyball, billiards, wrestling, softball, and swimming.

Club Football

The team plays against both varsity and other club teams from a four-state area. All home games are free and played on a field within walking distance of campus.

Membership is open to both boosters and players, however players are required to carry at least 12 credits per semester to comply with the rules of the North Carolina Football Association.

STUDENTS AND UNIVERSITY GOVERNANCE

The governance system of the university is headed by the Board of Visitors, a 15-member body appointed by the Governor of the Commonwealth of Virginia. This group has the legal authority and responsibility for Virginia Commonwealth University as established by legislation passed by the General Assembly of the Commonwealth of Virginia.

The Board of Visitors selects a president who, through the administration of the university, administers the institution's day-to-day business. The president is responsible to the Board of Visitors, and the Board of Visitors determines major policies for the university.

In 1969 the University Assembly was created to help propose major policy matters for presentation to the Board of Visitors. The University Assembly consists of 15 administrators, 15 faculty members and six students; the president of the university is the chairman.

The University Assembly has three sub-groups called councils. They are Council on Faculty Affairs, the Council on Academic Affairs, and the Council on University Student Affairs. The Council on University Student Affairs consists of nine students, three faculty members, and three administrators, and has a non-voting chairman, the vice-president for student affairs. Major policy questions concerning student life come through this council and are considered for presentation to the University Assembly, which in turn recommends to the Board of Visitors through the president.

The Council on University Student Affairs has created four sub-groups; namely, the Media Board, the Appropriations Board, the Program Board, and the Appointments Board. The membership of these groups is approximately the same: six students, two faculty members, and one administrator. The Council on University Student Affairs and its sub-groups are the major policy making bodies for the non-academic student life areas.

RULES AND REGULATIONS

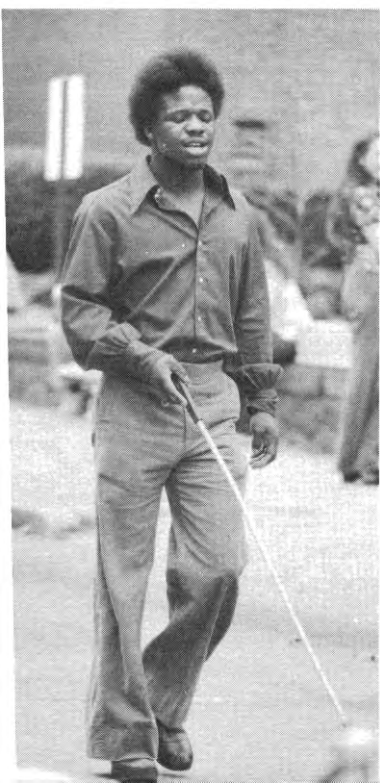
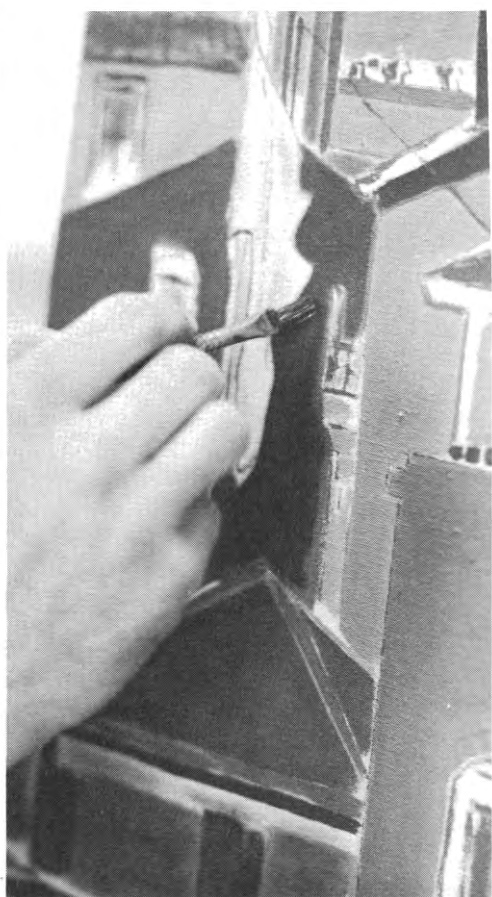
Each member of the university community has certain responsibilities, rights, and privileges. These are stated in some detail in the Rules and Procedures of Virginia Commonwealth University. The Rules and Procedures are printed in the campus calendar and are also available at the student life office and at registration.

STUDENT IDENTIFICATION CARDS

Students should carry their ID cards with them at all times and be ready to show them to any authorized university official who might request their identification. ID cards must be obtained prior to registering for classes. They are required for certain university functions such as borrowing books from the library and advanced registration. Students on the board plan use their ID cards as a meal pass. Any student who loses an ID card should apply to the Office of the University Registrar for a replacement. There will be a charge for the replacement card.

AUTOMOBILES

On-campus day parking is not available to students at this time. Students may apply for evening parking in university lots at the Parking Office at 920 West Franklin Street. The absence of student parking on-campus during the daylight hours, together with extremely limited off-campus parking, results in the recommendation that residence hall students should not attempt to bring their automobiles to Richmond. Unauthorized automobiles parked on campus will be removed at the owner's risk and expense.



PART V—ACADEMIC REGULATIONS

ADVISING PROGRAM

Students are responsible for knowing and fulfilling all general and specific requirements relating to the completion of their degree program.

The offices of the deans and department chairmen, in cooperation with faculty advisors, endeavor to follow each student's academic progress. Beginning with registration, a student is assigned to a faculty advisor who, in addition to giving academic counseling, is available for advice on vocational and personal matters. Students are encouraged to seek counsel whenever there is a need. If a faculty advisor is unable to resolve a problem satisfactorily, the student will be referred to the Counseling Center, to student personnel, or academic officers, as appropriate, or to the dean of student life for additional help and counseling.

ATTENDANCE REGULATIONS

The instructional program at VCU is based upon a system of class meetings involving lectures, discussion, and special reading and reporting assignments. Therefore it is important for each student to be in attendance on a regular basis. If a student must miss a class session, he is expected to have sufficient initiative to make up for himself the material missed. Absences for sickness, athletic trips, and class field trips are the responsibility of the student. Instructors are not required to provide make up examinations for students who miss such examinations.

The establishment of attendance criteria is the responsibility of the dean of each school, or if delegated, to his respective department chairman. It is the instructor's responsibility to clearly inform students of the provisions of such attendance policy.

When warranted each instructor will mail a warning directly to students in sufficient time to allow for corrective action without penalty. Copies of warnings will be furnished by department chairmen. Subsequent student failure to improve attendance will result in a grade of "WF."

CHANGE OF MAJOR

If a student wishes to change his major area of concentration, he may initiate this change under the following conditions:

1. He must be eligible for continuance in college on the basis of all credits attempted at the time he applies for a change of major and also for the semester his change of major becomes effective.
2. An applicant for a change of major at the Academic Campus will be accepted except when the major is in The School of the Arts. Students changing to a major in The School of the Arts must present a satisfactory portfolio or audition.
3. Change of major requests will be processed only during the first eight weeks of classes of each semester. Change of major forms may be obtained in the Office of the University Registrar.
4. Students changing their curricula from the MCV Campus to the Academic Campus will do so through a change of major.

CHANGE IN REGISTRATION

Once a student and his advisor have planned the student's program and the student is registered, it is expected that the student will not change his registration except for special reasons.

During Add/Drop Period. Changes in registration will be allowed during the first week of classes according to the following procedure:

1. Complete the add/drop form at the designated area and obtain a copy of the form for record purposes. Courses dropped during the add/drop period do not become part of the student's permanent academic record.
2. A change in registration from "Audit" to "Credit" must be made during the first week of classes of the semester in which the course is taken.
3. Courses which do not start or finish with the normal start and ending dates for the semester may only be added during the first week of classes of the semester in which the course is given. Courses dropped after the first week of classes of the semester will become part of the student's permanent academic record.

After Add/Drop Period. No courses may be added after the first week of classes. Courses may be dropped but only in accordance with the following procedures:

1. Add/drop forms may be obtained only at the Office of the University Registrar after the first week of classes.
2. Courses dropped after the first week of classes will become a part of the student's permanent record.
3. Advisor signature must be obtained before the add/drop form is submitted to the Office of the University Registrar and the advisor is to be notified of student course drops.
4. If a student ceases to attend a course without following proper procedures by using an add/drop form, a grade of "WF" will be assigned by the registrar.
5. Approval to drop a course during the last three weeks of class instruction of a semester will be granted only under unusual circumstances. A grade of "WF" is automatically assigned by the instructor in cases of continuous non-attendance during this period.

CLASSIFICATION OF STUDENTS

All students, both full- and part-time, are classified by credits earned as follows:

Freshmen	1 to 23 credits
Sophomores	24 to 53 credits
Juniors	54 to 84 credits
Senior	85 credits and above

The social or class standing of all students is identical with their academic classification.

CONTINUANCE IN COLLEGE OF DEGREE SEEKERS AND SPECIAL STUDENTS

Satisfactory Progress

In order to be making normal progress a student should maintain at least a "C" average on all work attempted at this university. Since the grade of "C" carries two grade points per semester hour, the student should thus have no fewer than twice as many grade points as semester hours attempted.

Grade Point Deficiency

If the student's cumulative grade point total is less than twice the number of semester hours attempted, he is said to have a grade point deficiency. (For example, if a student has attempted 32 semester hours, his grade points should total 64. If, in fact, his grade points total only 52, the deficiency is 12.)

In the calculation of semester hours attempted, all work attempted at this university is counted, regardless of whether or not certain courses are applicable to the major program which the student is pursuing or intends to pursue at the time of calculation.

Academic Warning

A student is placed on academic warning if at the end of any semester his cumulative grade point deficiency is more than nine but less than 21.

Academic Suspension

A student is automatically suspended from VCU at the end of any semester in which the cumulative grade point deficiency exceeds 20. Regardless of his cumulative grade point total—a student is suspended if his deficiency for any given semester exceeds 20 for that semester alone. Exceptions are made on occasion by the Academic Status Committee upon written petition to the student's academic dean. The student whose petition for waiver is denied may return to the university after an absence of one semester if the cumulative deficiency at that time is fewer than 21 grade points.

No student will be suspended for academic reasons until he has attempted 24 credits. The 24 credits will include any transferred credits.

Students who are suspended for academic reasons may register for courses on an "Audit" basis. Courses taken by these students for audit cannot be changed to credit or given credit by examination at a later date.

Course work taken at another institution while under academic suspension from VCU will be considered as part of the criteria for readmission. If the student is readmitted, the course work will be evaluated according to the provisions stated under the Admission of Transfer Students section. This course work may not be used to decrease the VCU grade point deficiency.

Eligibility to Return

A student under suspension may establish eligibility to return to VCU in the fall semester by attending summer school at VCU and reducing his cumulative grade point deficiency to 20 grade points or less.

A student who attends summer school, but fails to establish eligibility in the summer school, cannot attend during the fall semester but may apply for readmission for the following spring semester. If readmitted, he must reduce his deficiency during that semester and each subsequent semester until his deficiency is no more than 20. If he fails to do so, he will be suspended for the second time.

A student under suspension may also establish eligibility for consideration to return by remaining out of school for one academic year. Following the year, such a student may register as a special student in the Evening College or apply to the Office of Admissions for readmission as a degree-seeking student. The student who returns with a deficiency of more than 20 grade points must reduce the deficiency during the semester of re-

admission and each subsequent semester until the deficiency is no more than 20 quality points. If the student fails to do so, he will be suspended for the second time.

Change of grades which will affect academic eligibility must be made during the first week of classes of the semester in which the student wishes to continue attendance.

Second Suspension

Although students who have twice been suspended from VCU are not normally readmitted, exceptions are made on occasion by the Academic Status Committee written petition to the student's academic dean.

Deadlines for Application for Readmission

Readmission applications will be accepted for the fall semester as long as space in the candidate's desired program is available. Applications for the spring semester must be received by December 1.

CONTINUANCE POLICY FOR READMITTED STUDENTS

If a matriculated student at VCU withdraws from the university and if he is eligible to continue at the time of his withdrawal, he shall be eligible for readmission. If, however, upon readmission he has a deficiency of more than 20 grade points, he must, in order to remain eligible to continue, show continual improvement in each successive term until he reduces his cumulative grade point deficiency to 20 grade points or less, or he shall be subject to suspension.

DEGREE REQUIREMENTS

In addition to the course requirements indicated in the curriculum outlines, candidates for any degree are governed by the following policies:

Degree Program. An overall grade point average (GPA) of at least 2.00 (a "C" average) is required on all work presented for graduation for either an associate or bachelor's degree.

Total Credits Required. The total number of semester credits required for graduation depends upon the type of degree. Specific information may be found under the several degree program descriptions beginning with Part VI of this bulletin.

Major Concentration. An overall grade point average of at least 2.0 is required in the VCU courses that comprise the student's major.

Upper Level Courses. A minimum of 45 credits are required in courses numbered 300 and 400 for bachelor's degrees. Credits transferred from two-year institutions may not be used for upper level requirements.

Resident Requirement. Applicants are required to complete the last 30 credits at this institution for either an associate or bachelor's degree.

Semester Credit Limitation. A student who fails to meet degree requirements in any program after attempting a total of 150 semester credits will be denied further attendance unless he has the expressed approval of the Academic Status Committee. Attendance at other colleges will be equated on the basis of the number of semester credits accepted toward the degree program.

Degree Application Deadline. Each student who expects to complete his degree requirements by the end of a term is required to file an application for degree at the registrar's office no later than the dates indicated in the calendars appearing in the front of this bulletin.

Second Baccalaureate Degree. A second baccalaureate degree at VCU may be earned provided:

1. Permission is granted the student for the second baccalaureate by the Academic Status Committee with the previous approval of the chairman of the department in which the student desires to pursue his major concentration and the dean of the school awarding the second degree;
2. Students seeking the second undergraduate degree earn a minimum of 30 additional semester hours in residence after the awarding of the first degree and also satisfy any supplementary requirements of the department;
3. There is a substantially different relationship between the student's first major concentration and his proposed second degree. Such a relationship will constitute a significant criterion in determining the student's eligibility for a second baccalaureate;
4. The student is adjudged by the Academic Status Committee a well-qualified candidate who can benefit from a second degree.

Double Major Concentration. Through the submission of the appropriate form, a student may designate a second major concentration, provided that he meets departmental admissions requirements and is accepted by the second department. However, only one baccalaureate degree will be granted.

No student may exceed the 150-hour limit in credits toward the requirements of two or more majors.

The student must obtain approval for a second major prior to submitting his degree application. A notation recognizing completion of the requirements for the second major will be posted on the student's permanent record. In order to have the notation indicating that the second major has been earned, the student must also satisfy all the particular requirements of the degree program concerned.

Transfer Students. Transfer students are required to earn an overall grade point average of at least 2.0 on all courses attempted at VCU which are to be presented for graduation for either an associate or bachelor's degree at the university.

Armed Forces Service. Any student who has completed a minimum of six months' active service in any branch of the armed forces and who presents to the registrar's office proper proof of such service will be allowed up to four semester credits which can be applied only to satisfy required courses in physical education.

Correspondence Courses. Credits earned through correspondence courses are not acceptable toward a degree at VCU.

GRADE REPORTS

Reports showing the grades of students in their courses are sent at the middle and at the end of each semester. Mid-semester grades are not recorded on the student's permanent record, but the grades indicate the student's progress in each course at that point.

Grade reports are mailed to the official address on file in the Office of the University Registrar. Students may change their official address by submitting a written request to the Office of the University Registrar.

GRADING SYSTEM

Grades and Grade Points. College course work is measured both in terms of quantity (semester hours of credit) and quality (grades). Grades are assigned according to a letter system with each letter being assigned a grade point value. The letter grades and grade point value are as follows:

Grade Symbol and Meaning	Grade-Point Value per Semester Credit
A—Superior	4
B—Good	3
C—Average	2
D—Passing	1
F—Failing	0
AU—Audit	—
I—Incomplete	—
PR—Progress	—
W—Withdrawn	—
WF—Withdrawn Failing	0
WP—Withdrawn Passing	—

The above scale is known as the four-point grading system since four is the highest grade-point value assigned.

The number of grade points earned is computed by multiplying the grade-point value for the letter grade by the number of semester credits for the course. As an example, a student receiving an "A" (i.e. 4 grade points) in the first semester of freshman English (3 credits) receives 12 grade points.

Grade-Point Average. The grade-point average (GPA) is computed by dividing the number of grade points earned by the number of credits attempted.

Grade of "D". Subjects passed with a "D" grade or higher may not be repeated. The one exception to this policy is as follows: the chairman of the department concerned may recommend that a course be repeated if the course is specifically required in the major concentration and if there is no appropriate substitute. This recommendation should be made only in unusual circumstances and must be approved by the dean of the school involved. If a course with a "D" grade is repeated, the semester hours attempted and the grade points earned for both attempts are included in computing the cumulative grade point average.

The dean of the school concerned may also recommend that a student strengthen his background by repeating a "D" course on an audit basis.

Audit. Upon the approval of the student's advisor, the class size permitting, a student may register for a course on an audit basis. Audit students are charged the regular rate of tuition and fees, and an audit course is counted as a part of the student's semester load. A student registered on an audit basis, however, is not subject to attendance regulations and is not required to take tests or the final examination. Students enrolled for audit are not given a grade, and their records are marked "Audit."

A change in registration from "Audit" to "Credit" or vice versa must be effected during the add/drop period. A course taken for audit cannot be given credit by examination at a later date.

Grade of Incomplete. If because of an emergency situation the student is unable to meet all of the requirements of the course by the end of that semester, the grade of "Incomplete" may be given. A mark of "Incomplete" should not be given without an understanding between the instructor and the student.

The maximum time limit for the removal of an "Incomplete" is the end of the last day of classes of the next semester following the semester (or summer session) in which the "Incomplete" was incurred. At the end of the succeeding semester, an unremoved grade of "Incomplete" is automatically changed to a failing grade. Exceptions to this procedure must be approved by the dean of the school involved upon the recommendation of the instructor prior to the time limit, and a statement must be filed with the registrar.

Grade of PR. The grade of "Progress" may be used only in courses designated by the Committee on Instruction of the Academic Campus. "PR" is assigned as an interim grade for courses which are not completed at the time final grades are to be submitted. A grade of "PR" will not be included in the calculation of the grade-point average (GPA).

Grade of W. "Withdrawn" indicates that the student has officially dropped a course before the end of the sixth week of classes.

Grade of WF. "Withdrawn Failing" indicates that a student was failing the course at the time of an official drop, after the sixth week of classes and prior to the last three weeks of class instruction of a semester. The grade of "WF" is included in the calculation of the grade point average (GPA).

Students are not permitted to drop a class during the last three weeks of class instruction of a semester. A grade of "WF" is automatically assigned in cases of non-attendance during this period.

Grade of WP. "Withdrawn Passing" indicates that a student was passing the course at the time of an official drop, after the sixth week of classes and prior to the last three weeks of class instruction of a semester. The grade of "WP" is not included in the calculation of the grade point average (GPA).

MATRICULATION

A student has matriculated when he has been admitted as a regular undergraduate student in a degree program. All degree candidates must be matriculated students. Non-matriculated students are classified as "special" students. Special students desiring degree-seeking status must file an application for regular undergraduate admission with the Office of Admissions.

Degree programs are outlined beginning with Section VI of this bulletin.

SCHOLARSHIP HONORS

Dean's List. A student is placed on the dean's list for one semester if he has made a grade point average of 3.50 in the preceding semester, based on a minimum load of 15 completed credits with no grade below "C."

Students with grades of "Incomplete" are not eligible for the dean's list.

Graduation Honors. Candidates for a bachelor's degree are eligible for special scholarship recognition under the following conditions:

High Honors. Students with a cumulative grade point average of 3.60 or above through the final semester of the senior year on all courses attempted toward the degree awarded.

Honors. Students with a cumulative grade point average of 3.30 or above through the final semester of the senior year on all courses attempted toward the degree awarded.

A transfer student to qualify for graduation honors for the baccalaureate degree is required to complete a minimum of 45 credits at this institution with a minimum scholastic average at VCU of 3.60 for high honors or 3.30 for honors, supported by equivalent performance on all credits attempted elsewhere to make a combined average of 3.60 for high honors or 3.30 for honors.

Recognition of graduation honors will be made on the student's diploma, his permanent record, and in the commencement program.

STUDENT LOAD

A semester credit, the unit by which courses are measured, is defined as one hour per week of lecture-recitation or not less than two hours per week of laboratory work throughout a semester.

Full-time Students. The normal full-time student load constitutes a minimum of 12 credits and a maximum of 19 credits. The maximum load is approved only when there is every evidence that the student can carry such a load successfully.

Part-time Students. A student is classified as "part time" if during any semester he is registered for no more than 11 credits. The term "part time" applies to degree-seeking students, as well as to non-degree-seeking students. Special students are limited to a maximum of 11 credits in any one semester.

Overload. Permission for overloads (20-21 credits) are approved only in the following cases:

1. A senior in good standing who by taking no more than 21 credits can be graduated in the current academic year.
2. A student in good standing who has earned at least 60 credits toward degree requirements and who has an academic average of "B" (not less than a grade point average of 3.00).

No student may attempt more than 21 credits in any one semester.

Students will be charged an additional fee for each credit taken over a semester total of 19 credits.

TRANSCRIPTS

Requests for transcripts may be made in person or in writing to the Office of the University Registrar, 901 West Franklin Street, Richmond, Virginia 23284.

Transcripts of student academic records are issued by the Office of the University Registrar only upon the written request of the student. The request should be made at least one week prior to the date needed.

Transcripts cannot be issued during a two week period immediately following semester examinations.

Two free transcripts will be issued for each student. A charge of \$2 will be made for each additional transcript.

No transcript will be issued unless indebtedness to the university has been satisfied.

Transcripts given directly to students do not carry the university seal and are not official. The seal is affixed when the transcript is mailed directly from the university to another college or authorized persons.

WITHDRAWAL FROM COLLEGE

If a student finds it necessary to terminate his studies and withdraw from the university before the end of a semester, he must complete a withdrawal form obtained from the Office of the University Registrar. If a student withdraws from the university without permission, his permanent record

will carry a notation, "Withdrew Unofficially," and grades of "WF" will be assigned for each course pursued at the time of unofficial withdrawal.

If a student withdraws officially from the university before the end of the sixth week of classes his permanent record will indicate a grade of "W" for withdrawal for each course being pursued.

If he withdraws officially after the sixth week of classes and prior to the last three weeks of class instruction of a semester, his permanent record will indicate grades of "WP" for "Withdrawn Passing" or "WF" for "Withdrawn Failing" assigned by the individual instructors of courses being pursued at the time of withdrawal.

GENERAL COURSE INFORMATION

Course Numbering. Courses numbered in the 100 and 200 series comprise the lower division offerings and are open to freshmen and sophomores; courses numbered in the 300 and 400 series comprise the upper division offerings and are generally open to juniors and seniors. Exceptions to this general policy must be approved by faculty advisors at the time of registration. Courses in the 500, 600, and 700 series are for graduate students.

Evening College offerings are the same as those listed herein. Specific courses scheduled for evening in any semester will be listed in the Evening College Bulletin.

Summer School offerings are the same as those listed herein. Specific courses scheduled for any summer session will be listed in the Summer School Bulletin.

Course Interpretation. A course listed by a single number, as Business 121, indicates that it is a one-semester course and may be offered each semester or only one semester each year.

A course listed with a double number, as History 201, 202 and designated as semester courses, consists of two semester courses, either semester of which may be taken without the other.

A course listed with a double number, as English 101-102 and designated as a continuous course, consists of two semester courses, the first of which can be taken without the second, but the second of which cannot be taken without the first.

The university reserves the right to withdraw any course or program for which there is an insufficient demand.



PART VI—THE SCHOOL OF THE ARTS

HERBERT J. BURGART, Dean

DONALD B. TENNANT, Assistant Dean

ROBERT F. HESTER, Assistant Dean

ALICE B. DEAL, Librarian, The School of the Arts

WILLIAM STEWART, Director, Graduate Studies Office

BRUCE M. KOPLIN, Director, Anderson Gallery

The School of the Arts of Virginia Commonwealth University had as its beginning a sculpture course offered in 1926. In 1928 a one-faculty art department was formed under the direction of Miss Theresa Pollak and since that date has grown to its present organization, achieving national recognition through its quality program in the visual and performing arts.

In 1969 the Department of Dramatic Art and Speech and the School of Music, formerly independent units within Virginia Commonwealth University, were combined with the School of Art to form the present School of the Arts.

The School of the Arts is accredited by the National Association of Schools of Art and the National Association of Schools of Music.

The School of the Arts offers a distinctly professional program in which students devote the greater portion of each day to professional courses in the arts. Located within an urban complex of higher education, students

are provided with the advantages of comprehensive facilities as well as professionally competent faculty. It is the only state-supported professional school of the arts in the South and one of the few in the nation offering a professional curriculum within a combined academic and professional environment.

The purpose of The School of the Arts is to enliven and enrich literacy in the visual and performing arts through the advanced thought and perception of its students and its faculty. It is our intent to develop innovative approaches to the making and comprehension of works of art which elaborate upon the intricate complexities of contemporary man. These works of art clarify and give meaning to the circumstances within which men find themselves. To sustain inquiry into the nature of being and becoming, and to strengthen the artistic process and products that reflect that inquiry, constitute a major objective for The School of the Arts.

Each unique department contributes to the solution of, and encourages students to approach and resolve, aesthetic, intellectual, and technical problems with scholarly analysis and experimentation, informed discrimination, and environmental awareness. In short, The School of the Arts encourages the student to develop a highly professional attitude toward his work and the solution of significant creative problems.

Degree Programs

Baccalaureate programs within The School of the Arts are designed to prepare creative leaders in the visual and performing arts professions. Emphasis is placed on the development of individual competencies in the arts through the following departments which make up The School of the Arts:

Art Education	Music
Art History	Painting and Printmaking
Communication Arts and Design	Photography (no degree offered)
Crafts	Sculpture
Fashion Design	Theatre
Interior Design	

The School of the Arts offers graduate programs leading to the master of fine arts (M.F.A.), master of art education (M.A.E.), master of arts (M.A.), master of music (M.M.), and master of music education (M.M.E.) degrees with major and minor concentrations in various departments. Detailed information is available through **The School of the Arts Graduate Studies Bulletin**.

Transfer Students

Placement in all upper level courses is determined by departmental faculty committees, following evaluation of the student's record, performance, audition and/or the student's creative work. The student should contact the appropriate department chairman at the time of acceptance in order to arrange for such evaluation prior to enrollment.

Special Study in Studio Art

A limited number of exceptionally talented students may be allowed to complete three years of work or 90 semester credits entirely in art studio courses are recommended by the head of the Departments of Crafts, Painting and Printmaking, or Sculpture. The university makes no award upon completion of this professional work.

Special Charges (See page 45 also)

All majors enrolled in The School of the Arts are charged a comprehensive lab fee of \$25 each semester. The money is prorated to the individual departments, and the departments determine the expenditures which result in a return to the students through materials and/or services which may include models, field trips, or special lectures. Non-art majors enrolled in any of the numerous courses which require an additional outlay for materials will be billed for those individual fees by the Business Office.

Academic Requirements

All majors within The School of the Arts are required to earn a minimum of "C" in all major work attempted in order to remain in their departments.

Evaluation of the record of each student will be made periodically by the department and the student's advisor. If, at any time during undergraduate studies, the department faculty concludes that a student is not demonstrating adequate progress in his area of concentration, he will be advised to withdraw from that department.

General Information

Matriculated students in a professional curriculum receive preference in enrolling for courses in that program. However, unless otherwise indicated, all courses are open to any student within the university.

In view of the sequence in which course work is arranged, only transfer students will be considered for admission at mid-year.

With the exception of those in art history, all courses must be taken in numerical sequence unless approved by the chairman of the department in which they are listed.

In many of the courses, a considerable amount of work is necessarily done outside of class. Such work is in addition to that of the scheduled classes which students are required to attend.

Departments within The School of the Arts reserve the right to retain examples of student work for permanent collections.

Students should contact the appropriate department chairman, prior to enrollment, for a more detailed curriculum outline than that which is contained in this bulletin.

UNDERGRADUATE CREDIT BY EXAMINATION

1. Examinations for credit in courses offered by The School of the Arts may be taken in the fall or spring semester of the regular academic year and during the Summer Sessions by any currently enrolled student.
2. No one may take an examination for a course in which he has received transfer credit or in which he has received a "D" grade at VCU.
3. Each department shall determine which of its courses, if any, may be taken by examination and the eligibility or qualifications of the student to take a specific examination.
4. The grades of "A," "B," "C," "D," or "F" shall be recorded on the student's permanent record. Hours attempted, hours earned, and quality points will be added to the student's permanent record. The course will be used in computation of the student's grade point average and hours used for graduation.
5. The procedure for authorizing and conducting credit by examination shall be as follows:
 - A. A student who wishes to qualify for credit by examination shall apply to the registrar for a Credit by Examination Approval Form. The registrar shall certify that the student is currently enrolled. Application for credit by examination must be made within the first four weeks of any semester of the regular academic year or during the first week of any of the regular summer session.
 - B. The certified approval form must be signed by the chairman of the student's major and the chairman of the department offering the course. When all approvals are granted, the student shall pay the charge of \$5 per credit to the Cashier's Office.
 - C. The department shall determine the content of the examination and the readers for the examination. The student shall take the examination within two weeks of the date of final approval. No student shall be permitted to take more than two examinations in one day.
 - D. After the examination is completed, the chairman of the department giving the examination shall record the grade on the approval form and transmit it to the registrar for posting on the permanent record.

ART FOUNDATION PROGRAM

In the visual arts all beginning students and transfer students as necessary are enrolled in the Foundation Program which provides the basic concepts, skills, and experiences necessary for admittance to advanced professional studio work in each department. In the program career opportunities in the entire field of art are discussed. The student who has been accepted and placed in the Foundation Program will not have a departmental affiliation

until after the screening of portfolios which occurs during the spring semester of the freshman year. At that time students will be given the opportunity to apply to the department of their choice. Departmental acceptances will be based on individual student performance and competency in the chosen area.

Art Foundation Curriculum

	Credits	
	1st Sem.	2nd Sem.
Art Foundation 101-102. Communication and Presentation	2	2
Art Foundation 103-104. Communication Vehicles	2	2
Art Foundation 105-106. Arts History Survey	4	4
Art Foundation 107-108. Introduction to the Arts or Electives	2	2
Art Foundation 109-110. Drawing Vehicles	2	2
Art Foundation 111-112. Drawing Studio	2	2
English 101-102. Composition and Rhetoric	3	3
	<hr/> 17	<hr/> 17

ART EDUCATION

ALAN L. LANDIS, Chairman of the Department

Michael H. Ferris / Glenn B. Hamm / John Henry / Priscilla C. Hynson
Allen N. Lewis / Arthur W. Miller / Sherry Potts / Alan P. Schantz
Dorothy Simpson / Betty Tisinger

Part-time—Gail C. Presson

The purpose of the Department of Art Education is evidenced in its undergraduate program, which provides a breadth and depth of preparation in the arts as well as the necessary academic and professional courses to prepare and qualify students for teaching positions in the elementary, middle, and secondary schools. The art education major is continuously engaged in the introduction, facilitation, and evaluation of effective art experiences within existing educational systems, but with a view toward experimentation in the development of quality art programs for the future.

The art education department also acknowledges its role and responsibility as a service department to the university and the community-at-large. Through a variety of course offerings designed for non-art majors of all ages, the department actively seeks to increase individual aesthetic awareness and also acquaint its students with the process of creativity as an extension of their human potential.

Degree Requirements in Art Education

	Credits
Foundation Program	34
General Education Electives	12
American History	3
Laboratory Science	8

	<i>Credits</i>
Mathematics	3
School Health, Physical Education	4
Advanced Art History	3
Professional Education	27
Two-Dimensional Studios	14
Three-Dimensional Studios	14
Art Electives	12
	<hr/> 134

ART HISTORY

MAURICE BONDS, Chairman of the Department

Alice B. Deal / Richard C. Flint / James E. Fox / C. Krishna Gairola

Dennis H. Halloran / H. Gilda Hinter-Reiter / Sharon G. Jones

Bruce M. Koplin / Sue A. Monger / Joan L. Muller / Regenia A. Perry

Part-time—Carole G. Kass / Richard J. McCann

The Department of Art History, as part of a professional art school, makes it possible to offer two distinct curricula: (A) with a liberal arts orientation and (B) with a studio orientation. Program A prepares the future art historian to continue studies at the graduate level in his field. Program B is designed for the artist-historian who is interested in preparing for both studio and art history. Students must elect one of the two programs upon completion of the sophomore year.

Degree Requirements in Art History

LIBERAL ARTS ORIENTATION (A)

	<i>Credits</i>
Foundation Program	34
Advanced Art History	18
Literature	6
French or German	14
History	12
Speech	3
Aesthetics	6
Museum Methods or Project	12
Archaeology or Religion ..	3
Electives	18

126

STUDIO ORIENTATION (B)

	<i>Credits</i>
Foundation Program	34
Advanced Art History	18
Literature	6
French or German	14
History	6
Aesthetics	6
Fine Arts Studio	24
Electives	18

126

COMMUNICATION ARTS AND DESIGN

ED BEDNO, Chairman of the Department

Nicolas A. Apgar / William O. Bevilaqua / Arthur O. Biehl

Jonathan T. Bowie / John T. Hilton / Charlie J. Magistro

Robert J. Martin / Philip Meggs / Charles B. Scalin / Sidney A. Schatzky

Part-time: Jane Bedno / Alexa Gant / Elizabeth Meggs / Marilyn Scalin

This department's objective is to encourage individual, social, and environmental concern in the practice of visual communications and design. Contemporary life requires of this discipline that it relate man to his environment and his social heritage. This is a professional design department with an educational program combining both the aesthetic and the intellectual pursuits that characterize our contemporary society's information/communication orientation.

We offer instruction in a broad range of two- and three-dimensional design and in graphic, projection, and electronic media.

Students' learning potential will be encouraged through their relationship of knowledge and interests. Each student will be advised on continuance in this program through a required annual screening by a full faculty committee.

Degree Requirements in Communication Art and Design

	<i>Credits</i>
Foundation Program	34
Design Fundamentals	24
Visual Research	12
Photo and Film	8
C.A. and D. Electives	30
Literature	6
Design History	6
Approved Electives	12
	<hr/>
	132

CRAFTS

KENT F. IPSEN, Chairman of the Department

Richard A. Butz / Jack Earl / Thomas L. Kerrigan / Marilyn Leon

Alphonse Mattia / C. James Meyer / Thomas C. Siefke

Nancy K. Thompson / D. Ken Winebrenner

The Department of Crafts offers curricula leading to professional careers or graduate work in ceramics, metal, jewelry, weaving and textile design, glassworking and furniture design. A four-year curriculum leading to the bachelor of fine arts degree is offered.

The courses in this department are open to all students in the university, but must be taken in sequence starting at the 200 level in each media area. Majors must present a portfolio to the faculty for approval prior to graduation.

Degree Requirements in Crafts

	<i>Credits</i>
Foundation Program	34
Literature	6
Advanced Art History	6
Basic Crafts	12
Advanced Crafts	36
Approved Electives	30
	<hr/>
	124

FASHION DESIGN

OTTI Y. WINDMUELLER, Chairman of the Department

Greta N. Burg / Nancy S. Herrington / Charles O. Sigler

Carole C. Steinke / Henry C. Swartz

Part-time—Margaret M. Dillard

The Department of Fashion Design provides a program designed to prepare students to create fashions that meet professional standards in *haute couture* as well as in the garment industry. The main objective is to stimulate students intellectually and to develop creative talent for professional careers in the field of fashion. Graduates are prepared to assume positions as designers and pattern makers. They are frequently in demand for positions in related fields (i.e. fashion buyers, coordinators, costume curators, reporters, and stylists).

Students are expected to participate in field trips and are encouraged to take advantage of the European Art and Fashion Tour when offered by the department during summers.

Estimated additional expenses for materials, equipment, and services may average \$500-\$800 per year.

Degree Requirements in Fashion Design

	<i>Credits</i>
Foundation Program	34
Construction	4
Draping and Design	16
History of Apparel	6
Illustration and Design	10
Millinery	6
Pattern Drafting and Design	20
Presentation and Promotion	4
Textiles	3
Literature	6
Approved Electives	15
	<hr/> 124

INTERIOR DESIGN

BEN D. GUNTER, Chairman of the Department

J. Jewett Field / Dorothy T. Hamilton / Dorothy M. Hardy

Robert F. Hester / Novem M. Mason / Steven W. Teczar / Tom D. Witt
Ringo Yung

Part-time—Emmy L. Ayres / Rudolph O. Berger / Helen V. Dierks

Lloyd D. Fitzsimmons / Anne P. Ryland / Maurice J. Ullman

The Department of Interior Design offers a professionally-oriented program which seeks to produce competent creative designers whose realistic de-

sign solutions are based on human needs in the contemporary environment. Mastery of design techniques, knowledge of resources, and an awareness of interrelating disciplines equip the student to pursue responsible and varied creative design positions or to engage in further academic endeavor.

Field trips are an important part of some of the departmental courses, and students are required to participate in these trips. The expense of these trips is in addition to the tuition and should not exceed \$100 per year.

Degree Requirements in Interior Design

	<i>Credits</i>
Foundation Program	34
Architecture	9
Business Considerations	10
Design	40
Furniture Design	6
Graphics	6
Advanced Art History (includes Art History 321-322)	6
Literature	6
Approved Electives	15
	<hr/> 132

MUSIC

RONALD B. THOMAS, Chairman of the Department

L. Wayne Batty / Loran Carrier / Milton Cherry / Rudolph Crosswell
 Paul Dorsam / Mary Jane Fitzpatrick / Gary Hardie / Robert C. Lawes
 Ira Lieberman / Ardyth Lohuis / Melissa Wuslich Marrior
 Edward A. Mirr* / Raymond Montoni*† / Carl Pfeifer / Richard Rivers
 J. Lawrence Robinson / John D. Savage / Donald B. Tennant
 Sonia K. Vlahcevic**

Teaching Assistants: Ann Bakker* / John Colbert / John Floyd*
 Diva Goodfriend-Koven / Colin Hemmingsen / Kevin Kelly*
 William Powell / Daniel Wing*

Part-time: Robert Barker*† / Alger Batts / Walter Bettman / Donald Bick
 Judith Britton*† / Barbara A. Brown / Jeanette Cross / Robert E. DeWell
 Vincent Ellin*† / Joseph Kennedy* / Edward Kiehl / Linda Seay Lieberman
 John Marlow / Sally Martin / Hope Montoni / James Moore III
 Michael Morgan*† / Mamon Morrison* / Jonathan Mott*†
 John O'Bannon*† / Dorothy Pfeifer / Sheila Pillow / Robert A. Satterwhite
 Frantisek Smetana*† / Helen H. Spiers / Alexander Sung / Henry Whitener
 Christian Wilhjelm*†

General Information

The Department of Music offers a comprehensive program designed to assist the student in acquiring those intellectual and musical competencies

*Member of the Richmond Symphony Orchestra

**On leave of absence

†Member of the Richmond Sinfonia

which are imperative for active musical participation in a modern society. The requirements for entrance and graduation are in accordance with the standards advocated by the National Association of Schools of Music. An audition is necessary for admission, and students must meet the general admission requirements of the university. All freshmen entering the department are classified as "music majors" for their first year. During the second semester the student may apply for admission into a degree program (applied music, church music, music education, composition, music history) for his sophomore year. This decision may be postponed but must be made by the end of the fourth semester.

The course entitled Literature and Structure of Music (Music Theory 121 through 322) constitutes a musicianship core program within all fields of music study. In order to allow students alternatives in the form, sequence, and process of learning, two differing course structures have been developed to meet similar objectives. The first alternative offers a chronological study with initial emphasis on the earliest systems and literature of music in the Western world. Technical aspects of study parallel the chronological sequence. In the second alternative there is a broad exploration of basic musical concepts across period lines. While the program leans toward contemporary musical ideas, music from all periods is used as a resource in creative and interpretive strategies. A considerable emphasis is placed on aural discernment and improvisational, as well as compositional, activities.

The Department of Music, in cooperation with the School of Education, offers a program that leads to the bachelor of music education degree. The program includes those requirements necessary to qualify for the Collegiate Professional Certificate issued by the Commonwealth of Virginia. The requirements for the degree may be changed to meet those for certification in other states. State scholarships are available to students who will teach in the Commonwealth of Virginia.

All music majors are expected to enroll in two ensembles each semester of their residence, up to a total of 16 credits (14 credits for music education majors). The distribution of ensembles must include five semesters in large ensemble and five semesters in chamber music.

University students whose major is in a field other than music may register for private or class lessons and a wide variety of courses in music. Music Appreciation, Introduction to Afro-American Music and most Evening College music classes are specifically designed for the non-music major. Other courses are open by permission of the instructor. Non-music majors taking private lessons will be charged fees in accordance with the schedule below.

Fees*

In addition to those fees which are listed elsewhere in the catalogue, each student in music is charged \$110 per semester for an hour weekly private lesson in his principal performing medium. The fee for one half-hour weekly studio lesson is \$55 per semester. This fee is⁴ not refundable after the first lesson.

*The right is reserved to change fees for private instruction.

Community Music School

Pre-college, university, and adult students may receive private or class instruction through the Community Music School operated by the Department of Music. Information regarding registration and fee schedules may be obtained through the coordinator of the Community Music School, Virginia A. Rouse. No degree credit is granted for either private or class lessons taken through the school.

Degree Requirements in Music

Music Education

	Credits		Credits
Class Lessons in Instru- ments	4	English	6
Class Piano	4	History	6
Ensembles and Chamber Music	14	Laboratory Science	8
Junior Recital	—	Mathematics	6
Literature and Structure ..	36	Professional Education	16
Methods and Materials	6	Social Science Electives ..	6
Principal Performing Me- dium	21		<hr/>
			133

Sacred Music

Church Music	10	Principal Performing Me- dium	24
Class Piano	4	Secondary Performing Me- dium	8
Ensembles and Chamber Music	16	English	6
Improvisation	2	Languages for Performing Arts	6
Junior and Senior Recitals .	—	Approved Electives	10
Literature and Structure ..	36		<hr/>
Organ Design	2		130
Organ or Vocal Literature .	2		
Organ Practicum and/or Con- ducting	4		

Composition and Theory

Class Piano	4	Principal Performing Me- dium (composition)	12
Composition Courses	12	Principal Performing Me- dium (instrumental)	12
Ensembles and Chamber Music	16	Secondary Performing Me- dium	6
Junior and Senior Recitals .	—	English	6
Literature and Structure ..	36	Approved Electives	18
Music History and Litera- ture	6		<hr/>

**Applied Music: Brass, Percussion,
Strings, or Woodwinds**

	<i>Credits</i>
Class Piano	4
Ensembles and Chamber Music	16
Junior and Senior Recitals .	—
Literature and Structure ...	36
Pedagogy	4
Principal Performing Me- dium	24

Applied Music: Organ

Class Piano	4
Ensembles and Chamber Music	16
Improvisation	2
Junior and Senior Recitals .	—
Literature and Structure ..	36
Organ Design and Litera- ture	4
Organ Practicum	2
Principal Performing Me- dium	24

Applied Music: Piano

Class Piano	4
Ensembles and Chamber Music	16
Improvisation	2
Junior and Senior Recitals .	—
Literature and Structure ...	36
Pedagogy	4
Piano Literature	4

Applied Music: Voice

Class Piano	2
Ensembles and Chamber Music	16
Junior and Senior Recitals .	—
Literature and Structure ..	36
Pedagogy	4
Principal Performing Me- dium	24

Secondary Performing Me- dium	4
English	6
History	6
Approved Electives	28
	<hr/> 128

Secondary Performing Me- dium	4
English	6
History	6
Languages for Performing Arts	6
Approved Electives	16
	<hr/> 126

Principal Performing Me- dium	24
Secondary Performing Me- dium	4
English	6
History	6
Approved Electives	24
	<hr/> 130

Secondary Performing Me- dium	4
Vocal Repertoire	2
Acting	6
English	6
History	6
Languages for Performing Arts	6
Approved Electives	18
	<hr/> 130

Music History and Literature

Class Piano	2	Secondary Performing Me-	
Ensembles and Chamber		dium	4
Music	16	English	6
Literature and Structure ..	36	French, German, and Latin .	21
Music Research	3	History	6
Principal Performing Me-		Approved Electives	12
dium	24		
Recital	—		130

PAINTING AND PRINTMAKING

RICHARD KEVORKIAN, Chairman of the Department

James A. Bradford / James A. Bumgardner / Jewett Campbell
 Richard N. Carlyon / Thomas H. DeSmidt / Gerald M. Donato
 Salvatore L. Frederico / David N. Freed / JoAnn Koppany
 Bernard M. Martin / James B. Miller / Theresa Pollak (Professor Emeritus)
 Milo F. Russell / Jack D. Solomon / David A. Sucec / Shari Urquhart
 Philip S. Wetton / Morris Yarowsky

Part-time—David F. Sauer

The Department of Painting and Printmaking attempts to establish a foundation for the creative person who desires to attain professional status as a painter or printmaker.

As the students progress they are given an increasing amount of freedom; and as they demonstrate their acquisition of skill and insight, they are encouraged to explore more individually in all areas of their creative work. During the junior and senior years most students concentrate in the area of either painting or printmaking.

Degree Requirements in Painting and Printmaking

	<i>Credits</i>
Foundation Program	34
Drawing, Painting, and Printmaking	34
Art History	12
Literature	6
Approved Electives	44
	<hr/> 130

PHOTOGRAPHY

GEORGE D. NAN, Chairman of the Department

David M. Bremer / Clifton Dixon / John N. Heroy / Dale L. Quarterman

The Department of Photography services the needs of The School of the Arts and the university at large. It offers courses in basic and intermediate photography and color workshops. A limited amount of super 8mm film

experience is offered on the intermediate level. Students learn the basic techniques of photography and proceed to develop the visual senses on an advanced level.

The department does not offer a degree in the area of photography.

SCULPTURE

HAROLD E. NORTH, Chairman of the Department

Myron Helfgott / Charles R. Henry / Charles R. Renick

David E. Thompson / Lester Van Winkle

The sculpture department exists for creative people who wish to structure their ideas by manipulating tangible materials. The goal of the sculpture department is to instill in the students a sense of pride based on competence and to help them develop methods of working and an attitude which will sustain them in their professional and personal growth as sculptors.

Degree Requirements in Sculpture

	<i>Credits</i>
Foundation Program	34
Sculpture	32
Approved Electives (Studios, Humanities, Liberal Arts) ..	62
	<hr/>
	128

THEATRE

KENNETH CAMPBELL, Chairman of the Department

J. Rodney Busch / James R. Buss / Velesto H. Courts

William Temple Davis / Maurice L. Erickson / Theodore H. Greene

Raymond Hodges (Professor Emeritus) / C. Thomas Holloway

Edward C. Houser / Elizabeth I. Martin / Richard L. Newdick

William L. Prosser / Ruth E. Waldman

Part-time—Richard B. Askew / Juliette T. Crump

Olivia J. Garland / Mary D. Phillips / Frances D. Wessells

The Department of Theatre offers an intensive program designed to provide students with the professional and cultural foundation essential to attaining the highest standards of the art. Applicants are admitted only upon satisfactory demonstration of ability and genuine interest through audition and interview.

The department offers two bachelor of fine arts degrees. One is in theatre with emphasis in either performance or design. The other is in theatre education and leads to teacher certification in theatre and speech in the public schools of Virginia.

A major activity of the department is the production of plays, and the student is expected to function as a member of a theatrical company, ac-

quiring experience in all phases of theatrical activity. The demands of the program are stringent, and only those students who are willing to commit themselves to the work of the department, who are capable of observing strict professional discipline, and who are in good health, should apply.

Degree Requirements for the B.F.A. Degree in Theatre

Majors must satisfactorily complete 124 credits. Of that total, the following are required:

Introductory Performance Courses: 6 credits; Movement: 6 credits; Introductory Theatre Literature Courses: 6 credits; Speech: 6 credits; Production crew: 2-6 credits; English: 6 credits; Art History: 6 credits; Humanities /Literature/History: 6 credits. Total: 38-42 credits.

In addition to the above credits, a candidate for the B.F.A. degree in theatre must complete the remaining credits for his desired emphasis from the courses listed below. At least 18 of those credits must be either in the performance or design areas. The minimum in both areas is six credit hours.

	Credits
Performing	6-12
Design / Technical	6-12
Speech	6
Movement	6
Approved Electives	60

Degree Requirements for the B.F.A. Degree in Theatre Education

The total number of credits for a B.F.A. degree in theatre education is 125. The following courses are required for teacher certification.

	Credits		Credits
Performing	6	Humanities	6
Theatre	18	Mathematics/Science	14
Theatre Literature	9	Professional Education ...	22
Speech	12	Social Science	12
Design / Technical	2	Electives	3
English	21		

COURSES IN THE ARTS AND ART FOUNDATION

Unless otherwise indicated, courses must be taken in numerical sequence.

Arts 001 Open Studio Workshop Semester course; hours to be arranged. No credit.

Arts 190 Advanced Workshop, Drawing Semester course; 1 lecture hour and 6 studio hours. 3 credits. • Special summer work in drawing for the freshman applicant whose work shows potential worthy of consideration for advancement placement in September. Must be taken concurrently with

Arts 191 and 192. Students are admitted only by invitation of the dean of The School of the Arts.

Arts 191 Advanced Workshop, Design Semester course; 1 lecture hour and 9 studio hours. 4 credits. • Special summer work in design for the freshman applicant whose work shows potential worthy of consideration for advanced placement in September. Must be taken concurrently with Arts 190 and 192. Students are admitted only by invitation of the dean of The School of the Arts.

Arts 192 Advanced Workshop, Art History Semester course; 2 lecture hours. 2 credits. • Special summer work in art history for the freshman applicant whose work shows potential worthy of consideration for advanced placement in September. Must be taken concurrently with Arts 190 and 191. Students are admitted only by invitation of the dean of The School of the Arts.

Arts 309-310 and 409-410 Independent Study Semester courses; 3 to 18 studio hours. 1 to 6, 1 to 6 credits. Prerequisite: consent of department head and instructor. • This course will be limited to those few students who have demonstrated an unusual level of ability and an intense commitment to a particular area. The student must be enrolled in a regularly scheduled 300 level studio course. Offered to School of the Arts majors only.

Arts 313, 314 Interdisciplinary Topical Studies Semester courses; 1 lecture hour and 6 studio hours. 3, 3 credits. • This course is team taught by faculty from various departments within The School of the Arts. It is structured around the individual needs of each student whose interests require the interaction of several disciplines. The course is open to juniors and seniors within The School of the Arts and to others by permission of the instructors.

Arts 430/Arts 530 Guided Study Abroad 3-9 credits. Permission of instructor required. • Designed to enhance the students' knowledge by providing first-hand experience with the most significant contribution of aesthetic import within the geographic areas traveled.

Art Foundation 101-102 Communication and Presentation Continuous course; 1 lecture hour and 3 studio hours. 2-2 credits. • A foundation course with the emphasis on conceptualization, sensing, and knowing. This course includes studies in pre-conceptions, value systems, visual semantics, attitudes, criticism, and analysis of visual phenomena. This course is also an introduction to the concepts and nature of materials. For beginning students in The School of the Arts. Offered to art majors only.

Art Foundation 103-104 Communication Vehicles Continuous course; 1 lecture hour and 3 studio hours. 2-2 credits. • A foundation course with emphasis on systems and non-systems of spatial order, as well as color applications and theory. For beginning students in The School of the Arts. Offered to art majors only.

Art Foundation 105-106 Arts History/Survey Continuous course; 4 lecture hours. 4-4 credits. • A survey of the visual and related creative arts

emphasizing the development and impact of the historical past on contemporary concepts of creative human endeavor. For beginning students in The School of the Arts. Offered to art majors only.

Art Foundation 107, 108 Introduction to the Arts Semester courses; 2 lecture hours. 2-2 credits. • An orientation course designed to provide a comprehensive understanding of the role of the visual arts as a significant contributing factor in the creation of a meaningful human environment. For beginning students in the school. Offered to art majors only.

Art Foundation 109-110 Drawing Vehicles Continuous course; 1 lecture hour and 3 studio hours. 2-2 credits. • A foundation course with the emphasis in traditional drawing, including perspective, anatomy and artistic judgment. For beginning students in The School of the Arts. Offered to art majors only.

Art Foundation 111-112 Drawing Studio Continuous course; 1 lecture hour and 3 studio hours. 2-2 credits. • A foundation course with the emphasis on invention and imagination. This course is designed to challenge and develop the student's facility for combining known phenomena and personal imagery. For beginning students in The School of the Arts. Offered to art majors only.

COURSES IN ART EDUCATION

Art Education 121-122 Principles of Art Continuous course; 1 lecture hour and 2 studio hours. 2-2 credits. • An introduction to two- and three-dimensional art forms with special emphasis on appreciation through participation. Not offered for credit to art majors.

Art Education 301, 302 Art for Elementary Teachers Semester courses; 2 lecture and 2 studio hours. 3, 3 credits. • The nature of art and its function in the lives of individuals and society is considered in addition to materials and methods for guiding the visual expression of children.

Art Education 310 Survey of Art Education Semester course; 2 seminar and 3 studio hours. 3 credits. • Seminar dealing with basic, theoretical, and philosophical approaches to art education with particular attention to child development and curricula design. Students will be offered opportunities to observe actual classroom procedures. For art education majors only.

Art Education 401-402 Methods of Art Education Continuous course; 1 seminar hour and 6 studio hours. 3-3 credits. • The philosophy, methods, curriculum, and materials of the school art program are studied in these courses. For art education majors only.

Art Education 404 Art Education Seminar Semester course; 2 seminar hours. 2 credits. • A seminar concurrent with student teaching which gives the students an opportunity to discuss and evaluate their progress in teaching assignments and other related activities. For art education majors only.

Art Education 406 Post-Student Teaching Seminar 3 seminar hours. 3 credits. Prerequisite: Education 447, 448. • Students will evaluate their

student teaching experiences with particular emphasis on changes in philosophy and their relation to curriculum development. For art education majors only.

Art Education 408 Two-Dimensional Art Experiences Semester course; 1 seminar hour and 4 studio hours. 3 credits. • The course explores the media, techniques, and concepts of drawing, painting, and printmaking. Not offered for credit to art majors.

Art Education 409 Three-Dimensional Art Experiences Semester course; 1 seminar hour and 4 studio hours. 3 credits. • Exploration of sculptural concepts with three-dimensional materials such as wood, metal, clay, fibre, plaster, plastic, and glass. Not offered for credit to art majors.

Art Education 411-412 Fashion Media Continuous course; 1 lecture hour and 4 studio hours, 3-3 credits. • Exploration of design concepts, media techniques, and actual execution in fabrics, jewelry, and ceramics with consideration for application to fashion design. For fashion design majors.

COURSES IN ART HISTORY

Art History 103, 104 Art History, General Semester courses: 3 lecture hours, 3, 3 credits. • First semester: Pre-historic through Gothic. Second semester: Italian Renaissance through Modern. Illustrated lectures. Not offered for credit to art majors without consent of advisor.

Art History 201, 202 Western World Art Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: Art Foundation 105-106 or Art History 103, 104. • A general study of the art of Western civilization to be given concurrently with English 201, 202. First semester: Classic to Mannerist. Second semester: Baroque to Modern.

Art History 203, 204 Survey of Oriental Art Semester courses; 3 lecture hours. 3, 3 credits. • First semester: The art of India and Southeast Asia. Second semester: The art of China and Japan. Illustrated lectures.

Art History 301 Ancient Art Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • An intensive survey of Egyptian, Mesopotamian, Greek, Etruscan, and Roman Art.

Art History 302 Medieval Art Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • An intensive survey of Western art and architecture between 300 and 1400 A.D.

Art History 303 Art of the Italian Renaissance Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • The painting, sculpture, and architecture of Renaissance Italy.

Art History 304 Renaissance in Northern Europe Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • Painting, architecture, and sculpture during the North European Renaissance.

Art History 306 Twentieth Century Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • A

survey of twentieth century art with emphasis on architecture, painting, and sculpture.

Art History 307, 308 History of the Motion Picture Semester courses; 3 lecture hours. 3, 3 credits. No prerequisite. • The history of development of the motion picture from its early beginnings to the present, with both technical and aesthetic consideration. Appropriate films are shown in addition to lectures. \$10 laboratory fee.

Art History 309 Introduction to Greek and Roman Archaeology Semester course; 3 lecture hours. 3 credits. • Selected urban centers of the classical world, their rise, destruction or renewal by urban planning; the history of classical archaeology and its impact on modern European art. Emphasis is on the living context of mature and complex peoples: Crete, Mycenae, Classical and Hellenistic Greece, the Etruscans, and Rome.

Art History 315, 316 American Art to 1865, American Art Since 1865 Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • A study of architecture, painting, and sculpture from the colonial period to the present.

Art History 317, 318 History of Architecture Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106 or permission of the instructor. • First semester: major architectural forms from ancient Egypt through Renaissance Italy. Second semester: architecture in Europe and America from the seventeenth century to the present.

Art History 319 Introduction to Conservation of Paintings Semester course; 3 lecture hours. 3 credits. • An introduction to the art and science of the conservation treatment of paintings. The course is designed to acquaint artists and art historians with methods of examination, treatment, and analysis of oil paintings on canvas and wood in conjunction with literary sources.

Art History 321-322 Interior Design and Architecture Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Art history 103, 104 or Art Foundation 105-106. • A survey of the major styles in interior and exterior architecture and furnishings dating from ancient Greece. Emphasis is given to the styles in Italy, France, England, and America from the Renaissance to the middle of the nineteenth century.

Art History 325-326 Survey of Contemporary Painting Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: general survey of art history. • An illustrated lecture survey of painting from Abstract Expressionism to the present.

Art History 327 Baroque and Rococo Art Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • The art and architecture of Italy and northern Europe between 1600 and 1750.

Art History 328 Nineteenth Century Art in Europe Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Founda-

tion 105-106. • Study of European art and architecture between 1770 and 1900.

Art History 401/Art History 501 Italian Painting of the Renaissance Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • Detailed consideration of the great masters of painting from the thirteenth through the sixteenth centuries.

Art History 403/Art History 503 Origins of Modern Sculpture Continuous course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • Early twentieth century sculpture and its evolution from the art of the past.

Art History 404/Art History 504 Contemporary Sculptors Continuous course; 3 lecture hours. Prerequisite: Art History 403. • Later twentieth century sculpture and the philosophy of its artists.

Art History 406/Art History 506 Modern Painting Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • An analysis of the major movements in twentieth century painting.

Art History 411/Art History 511 Ancient Art of the Americas Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • A study of the arts of Central and South America with special emphasis on Mexico, Peru, and the Mayan culture.

Art History 412/Art History 512 African and Oceanic Art Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • A study of the artifacts of some of the major art-producing tribes of Africa and Oceania.

Art History 414/Art History 514 Gothic Art Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • Origins and development of the Gothic style with emphasis on the architecture and sculpture of France.

Art History 415/Art History 515 Afro-American Art Semester course, 3 lecture hours. 3 credits. Prerequisite: advanced standing. • A study of the art forms produced by Americans of African origin from the seventeenth century to the present with an emphasis on contemporary trends in black art.

Art History 416/Art History 516 The High Renaissance Semester courses; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • Intensive consideration of the great masters of Italian art in the early sixteenth century.

Art History 417/Art History 517 Classical Art Semester courses; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • The art and architecture of Greece and Rome.

Art History 419, 420 Museum Methods Semester courses; 6 to 12 studio hours. 3 or 6 credits. Prerequisite: consent of department head. • Field work in conjunction with local or regional museums. Open only to junior

and senior students of high standing. Students entering a museum program must apply several weeks in advance of registration in order to complete preliminary requirements.

Art History 421-422 Aesthetics Continuous course; 3 lecture hours. 3-3 credits. • Analysis and evaluation of contemporary art criticism (including the film as an art form). John Dewey, Susan Langer, and other critics are considered.

Art History 425-426/Art History 525-526 Seminar in Contemporary Painting Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Art History 325-326 or its equivalency. • A seminar dealing with a problematic approach to the arts with emphasis on painting from 1940 to the present.

Art History 428/Art History 528 The Art of Southeast Asia Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • The art of Burma, Malaya, Thailand, Cambodia, Indochina, and Indonesia.

Art History 429/Art History 529 Early Architecture of Virginia Semester course; 3 lecture hours. 3 credits. Prerequisite: minimum of six semester credits in either art, architecture or history of the period. • An investigation of the sources, influences and accomplishments in the Architecture of Virginia during the seventeenth, eighteenth, and early nineteenth centuries. Weekly field trips to visit historic buildings will alternate with lectures.

Art History 430 Architectural History: Richmond Semester course; 3 lecture hours. 3 credits. • History and origins of Richmond area architecture. No prerequisites.

Art History 433/Art History 533 Early Indian Art Semester course; 3 lecture hours. 3 credits. Prerequisite: general background in art, history, or religion of the area. • The Indus Valley civilization through Maurya, Sunga, Kushana, Andhra, Gupta, and Pallava periods.

Art History 434/Art History 534 Later Indian Art Semester course 3; lecture hours. 3 credits. Prerequisite: general background in art, history, or religion of the area. • The Chalukya, Chola, Rajput dynasties, early Islamic, and Moghul periods through British India.

Art History 435/Art History 535 Reality and Revival in Virginia Architecture Semester course; 2 lecture hours. 2 credits. Prerequisite: minimum of six semester credits in either art, architecture, or history of the period. • A study of revival architecture in the Richmond area in relation to architecture of the western world. Lectures are followed by field trips to study actual buildings.

Art History 436 Eighteenth Century Art and Architecture Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • An evaluation of European art of the eighteenth century with in-depth study of key monuments and major movements.

Art History 437-438 Art in the Nineteenth Century Continuous course; 3-3 lecture hours. 3-3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • An evaluation and analysis of the visual arts in the nineteenth century. Special emphasis will be given to the cultural and industrial changes, their influences upon the arts and the development of modern art.

Art History 439 Seventeenth Century Art and Architecture Semester course; 3 lecture hours. 3 credits. Prerequisite: Art History 103, 104 or Art Foundation 105-106. • An evaluation of European art of the seventeenth century within-depth study of key monuments and major movements.

COURSES IN COMMUNICATION ARTS AND DESIGN

NOTE: Open to any student with permission of individual course instructor.

Communication Art 205-206 Visual Techniques Continuous course; 2 lecture hours. 2-2 credits. • An introductory survey of the tools, techniques, and processes of contemporary visual communications.

Communication Art 223-224 Visual Thinking Continuous course; 2 lecture hours. 2-2 credits. • An exploration of media and processes for expressing mental concepts in visual terms.

Communication Art 227-228 Problems in Visual Communication Continuous course; 4 lecture hours and 6 studio hours. 6-6 credits. • A workshop in the design disciplines as related to contemporary issues and their solutions. Students will solve design problems by being exposed to and involved with the disciplines of problem definition, research, analysis, idea generation, synthesis, development, refinement, and presentation.

Communication Art 239-240 Visible Language Continuous course; 2 lecture hours. 2-2 credits. • An exploration of the visual media of language and symbol expression, the origins and evolution of letterforms and symbols, and their design and application.

Communication Art 307 Origins of Visual Communications Semester course; 3 lecture hours. 3 credits. • A history of man's visual communications and design from prehistoric times to the twentieth century.

Communication Art 308 Twentieth Century Visual Communications and Design Semester course; 3 lecture hours. 3 credits. • An investigation of contemporary visual communications concepts, media, and images and their role in post-industrial society.

Communication Art 321-322 Visual Research Project I Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • The structuring, research, execution, and presentation of an independent project in visual communications under the direction of a faculty advisor. The student will be encouraged to become a self-generating problem seeker and solver with the ability to carry out self-stated goals.

Communication Art 331-332 Illustration Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • Pictorial representation for visual

communications. Emphasis on concepts and media experimentation for effective visual communication.

Communication Art 337-338 Drawing and Color Concepts Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • Exploration of conscious and subconscious solutions to the phenomena of drawing and use of color.

Communication Art 349-350 Variable Media Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • Innovative activity realized through the use of diversified media with emphasis on light/motion and electronic solutions.

Communication Art 359-360 Three-Dimensional Design Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • Three-dimensional form as communications, motivational, and learning media.

Communication Art 363-364 Print Communications Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • The design and reproduction of printed communications.

Communication Art 421-422 Visual Research Project II Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • Advanced problems in visual research. Same criteria as Visual Research Project I. Student will be expected to develop projects of a more complex nature. At this advanced level successful completion and presentation of an individual project is a requirement for graduation. Student will leave the department with a complete audio-visual record produced either on motion picture film, video tape, or sound/slide.

Communication Art 453-454 Animation Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • The designing and making of animated films. Principles and methods of creative animation will be explored.

Communication Art 455-456 Cinematography Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • The directing and making of motion picture films. TV will also be employed as adjunct learning for cinematic techniques. Students will work in teams, assisted by faculty.

Communication Art 461-462 Videographics Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. • An exploration of the technical and innovative potential of television as a kinetic graphic design medium.

Communication Art 457-458 University Graphics Continuous course; 2 lecture hours and 3 studio hours. 3-3 credits. Prerequisite: Communication Art 363-364. • A professional studio for students to design and produce print communications for the university.

COURSES IN CRAFTS

Crafts 201-202 Metalsmithing Continuous course; 2 lecture and 2 studio hours. 3-3 credits. • A course structured on specific instruction in metal forming processes applicable to the functional object including casting,

joinery, and surface enrichment. Personal investigation as well as research in contemporary and historical metal forms is encouraged.

Crafts 211-212 Jewelry Continuous course; 2 lecture and 3 studio hours. 3-3 credits. • An exploration of the methods, materials, and development of jewelrymaking, including casting, lapidary, enamels, etc. Individual experimentation is encouraged.

Crafts 221-222 Woodworking and Furniture Design Continuous course; 2 lecture and, 3 studio hours. 3-3 credits. • Fundamental techniques in fabrication of furniture involving basic joinery construction and design and mechanical drawing.

Crafts 241-242 Beginning Ceramics Continuous course; 2 lecture and, 3 studio hours. 3-3 credits. • Basic problems in the history, design, technology, and production of ceramic ware.

Crafts 261-262 Beginning Textiles Continuous course; 2 lecture and 3 studio hours. 3-3 credits. • Basic course involving both loom and non-loom techniques with discussions of the tools, materials, heritage, and modern application of each craft covered.

Crafts 283, 284 Design Semester courses; 1 lecture and 2 studio hours per week. 2, 2 credits. • Exploration into design and innovative techniques aiding the designer/craftsman. Permission of instructor required.

Crafts 301, 302/Crafts 401, 402 Advanced Metal or Jewelry Semester courses; 3, 6, or 9 credits per semester. Hours to be arranged. Prerequisite: Crafts 201-202 or Crafts 211-212. • This course offers opportunity for specialization and development of techniques.

Crafts 321, 322/Crafts 421, 422 Advanced Furniture Design Semester courses; 3, 6, or 9 credits per semester. Hours to be arranged. Prerequisite: Crafts 221-222. • Advanced design and construction, investigation of varied materials, and machine processes.

Crafts 341, 342/Crafts 441, 442 Advanced Ceramics Semester courses; 3, 6, or 9 credits per semester. Hours to be arranged. Prerequisite: Crafts 241-242. • Advanced problems in the design and production of functional and non-functional ceramic products.

Crafts 361, 362/Crafts 461, 462 Advanced Textiles Semester courses; 3, 6, or 9 credits per semester. Hours to be arranged. Prerequisite: Crafts 261-262. • Advanced work in contemporary and traditional weaving techniques.

Crafts 365, 366 Natural Dyes Semester courses; 2 lecture and 3 studio hours. 3, 3 credits. Prerequisite: Crafts 261-262. • Identification and collection of plants to be used in the natural dyeing process with wool, cotton, and linen. Course will involve field trips and classroom application.

Crafts 367-368 Tapestry Semester courses. 2 lecture and 3 studio hours. 3, 3 credits. Prerequisite: Crafts 261-262. • Origins and history of tapestry forms and execution of techniques.

Crafts 385, 386/Crafts 485, 486 Educational and Recreational Crafts Semester courses; 2 lecture and 3 studio hours. 3, 3 credits. • An experimental concentration in the minor crafts.

Crafts 387, 388/Crafts 487, 488 Experimental Materials and Techniques Semester courses; 2 lecture and 3 studio hours, 3, 3 credits. Permission of instructor required. • Experimentation and research into new materials and techniques.

Crafts 482 Senior Seminar Semester course; 1 lecture hour. 1 credit. Semester course to be offered during second semester of each year. • Resume and portfolio preparation, small business practices and selling, exhibition, and other topics deemed necessary to the producing craftsman.

Crafts 491, 492 Fieldwork Semester courses; 18 studio hours. 6, 6 credits. Prerequisite: consent of department head. • Senior students are assigned on an individual basis. Fieldwork supervisor will arrange student's work and evaluate his performance.

COURSES IN FASHION DESIGN

Fashion Design 201-202 Clothing Construction Continuous course; 6 studio hours. 2-2 credits. • Introducing the principles involved in garment construction with emphasis on professional design-room practices as to sewing, pressing, and finishing of garments. For fashion majors only.

Fashion Design 203-204 Apparel Design I Continuous course; 3 studio hours. 1-1 credits. • Emphasizing fashion fundamentals as to lines, colors, texture, etc.; enhancing figure assets and nullifying faults. The cultivation of style sense and the acquisition of elegance and individuality. Also a study of outstanding designers. For fashion majors only.

Fashion Design 205-206 Pattern Drafting Continuous course; 1 lecture and 3 studio hours. 2-2 credits. • Fundamental principles of pattern-making, developing various styles from the master pattern, creating original designs to be constructed in muslin. For fashion majors only.

Fashion Design 207-208 Fashion Illustration Continuous course; 3 studio hours. 1-1 credits. • Introducing drawing of the fashion-figure and apparel, sketching in pencil, using water color efficiently, and developing skill in quick fashion sketching. For fashion majors only.

Fashion Design 209 Textile Laboratory Semester course; 3 lecture hours, 3 credits. • A study of fabric construction, finishes, and the properties of natural and man-made fibers. Fabric samples are studied in relation to their usage from the designer's point of view.

Fashion Design 211, 212 Beginning Dressmaking Semester courses; 1 lecture and 2 studio hours. 2, 2 credits. • Students are exposed to basic sewing with emphasis on detailed construction, basic fitting, and pressing techniques. Simple garments will be constructed from commercial patterns. Not open to fashion design majors. Offered evenings and in summers only.

Fashion Design 301-302 Draping and Design Continuous course; 1 lecture and 9 studio hours. 4-4 credits. • Fundamentals of muslin draping on

the dress form, development of designs from sketches, and creation of original designs. For fashion majors only.

Fashion Design 303-304 Apparel Design II Continuous course; 3 studio hours. 1-1 credits. Prerequisite: Fashion Design 203-204. • Exposure to sources for design inspiration to stimulate original designs. Sources include costume research, field trips, music, nature, and study of various cultures. For fashion majors only.

Fashion Design 305-306 Pattern Development and Production Techniques Continuous course; 1 lecture and 9 studio hours. 4-4 credits. Prerequisites: Fashion Design 201-202 and Fashion Design 205-206. • Methods of developing and grading standard size patterns. Layout, cutting, and construction of garments as demanded in the garment industry. For fashion majors only.

Fashion Design 307-308 Design in Millinery Continuous course; 1 lecture and 6 studio hours, 3-3 credits. • Fundamental techniques of millinery construction in the use of various media. Professional standards of originality, suitability, and proficiency are emphasized. For fashion majors only.

Fashion Design 309-310 Flat Pattern Design Workshop Continuous course; 1 lecture and 2 studio hours. 2-2 credits. • The development of original ideas with the use of a basic pattern. Emphasis on designing, drafting patterns, and fitting muslin patterns for construction. Not open to fashion design majors. Offered evenings only.

Fashion Design 311, 312 Advanced Dressmaking Techniques Semester courses; 1 lecture and 2 studio hours. 2, 2 credits. • The emphasis is on teaching professional methods and designer techniques in the construction of garments. Commercial or original designs may be used. Not open to fashion design majors. Offered evenings only.

Fashion Design 313-314 Fashion Illustration II Continuous course; 3 studio hours, 1-1 credits. Prerequisites: Fashion Design 207-208. • Developing and illustrating original designs as finished fashion plates. For fashion majors only.

Fashion Design 401-402 Design Studio Continuous course; 2 lecture and 6 studio hours. 4-4 credits. Prerequisites: Fashion Design 301-302 and 303-304. • Varied class and individual design problems encouraging development of ideas through any medium. Individual research projects are required. Second semester devoted to preparations for the annual fashion show. For fashion majors only.

Fashion Design 403-404 Fashion Illustration III Continuous course; 3 studio hours. 1-1 credits. Prerequisites: Fashion Design 313-314. • The preparation of designer collections in portfolio form. Students are exposed to various techniques in fashion illustration. For fashion majors only.

Fashion Design 405-406 Design in Tailoring Continuous course; 1 lecture and 9 studio hours. 4-4 credits. Prerequisite: Fashion Design 305-306. • Custom tailoring required in high fashion establishments and the coordination of design, fabric, and model of individual garments. Second semester

devoted to preparations for the annual fashion show. For fashion majors only.

Fashion Design 409-410 Fashion Presentation Techniques Continuous course; 1 lecture and 3 studio hours. 2-2 credits. • Students are exposed to a wide variety of media, used to present fashion to the public. The cyclical nature of fashion is studied through the use of examples of current trends and their acceptance at various social and economic levels. For fashion majors only.

COURSES IN INTERIOR DESIGN

Interior Design 103, 104 Introductory Studio Course Semester courses; 1 lecture and 2 laboratory hours. 2, 2 credits. • A practical course in which the student becomes familiar with fundamentals of interior design through work with floor plans, furniture selection and arrangement, floor and wall composition, color harmony, wall paper, and other aspects of design. Not open to interior design majors.

Interior Design 201-202 Beginning Interior Design Studio Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • The elements of design, color theory, and major considerations in the selection and placement of furnishings are taught and developed through a series of varied problems. The student then makes use of this information in designing and furnishing complete interiors. Interior design majors only.

Interior Design 203-204 Introduction to Architecture Continuous course; 1 lecture and 6 studio hours. 3-3 credits. • Architectural and structural theory, design, drawing, and blueprint reading.

Interior Design 211, 212 Introduction to Interior Design Semester courses; 3 lecture hours. 3, 3 credits. • An analysis of the fundamentals of interior design through the study of furniture selection and arrangement, color, composition, textiles, accessories, and other interior components.

Interior Design 217, 218 Great Houses and Monuments: Europe and America Semester course; 3 lecture hours. 3, 3 credits. • Profusely illustrated lectures for those interested in historical architecture and furnishings. First semester continental Europe. Second semester England and America. Also valuable for persons anticipating European travel. Not open for interior design majors.

Interior Design 221-222 Interior Design Graphics Continuous course; 1 lecture and 6 studio hours. 3-3 credits. • Introduction to the various presentation media and techniques to provide basic communication skills such as drafting, rendering, perspective drawing, layout organization, and model making for professional graphic presentations. Interior design majors only.

Interior Design 301-302 Environmental Factors Continuous course; 1 lecture and 3 studio hours. 2-2 credits. • Acoustical, illumination, and atmospheric control environmental support systems are discussed, and the principles applied to interior situations. Interior design majors only.

Interior Design 311-312 Commercial Design Continuous course; 2 lecture and 12 studio hours. 6-6 credits. • Function and design is emphasized within a specific contract environment. This includes layouts, details, and specifications for professional presentation. Interior design majors only.

Interior Design 331-332 Business Procedures Continuous course; 3 lecture hours. 3-3 credits. • Study of interior design business practices and workroom procedures. Interior design majors only.

Interior Design 401-402 Advanced Interior Design Continuous course; 2 lecture and 9 studio hours. 5-5 credits. • Problems exploring period and contemporary design and their relationships are planned to meet the needs of specific clients. In keeping with the endeavor to prepare the students for the professional world, the problems are as varied as possible. Interior design majors only.

Interior Design 411-412 Trade Sources Continuous course; 2 lecture hours. 2-2 credits. • Comparative analysis of the major sources of supply and their products. When convenient, manufacturers' representatives will meet with the class.

Interior Design 421-422 Furniture Design and Construction Continuous course; 1 lecture and 6 studio hours. 3-3 credits. • Original student furniture designs are developed through a coordinated study of structure and materials. Interior design majors only.

Interior Design 441 Survey of Modern Architecture Semester course; 3 lecture hours. 3 credits. • General survey of the field of architecture. An analysis of the works of architects from the nineteenth and twentieth centuries. Offered in evening only.

COURSES IN MUSIC

Applied Music 101,102 / 201,202 / 301,302 / 401,402 Private Instruction: principal and secondary performing mediums Semester courses; one half-hour or one hour private lesson per week. 1 or 3 credits. Extra fee required. • Hour lessons are primarily for music students on a major instrument and require 1 hour per credit per day practice time. All non-majors should register at 100 level except with permission of department chairman. Section: (1) piano, (2) voice, (3) organ, (4) percussion, (5) flute, (6) oboe, (7) clarinet, (8) saxophone, (9) bassoon, (10) guitar, (11) trumpet, (12) trombone, (13) baritone, (14) French horn, (15) tuba, (16) violin, (17) viola, (18) cello, (19) double bass, (20) harpsichord, (21) composition (offered only on 300 and 400 levels for 3 credits; with permission of instructor), (22) harp, and (23) carillon (offered only for 1 credit).

Applied Music 151,152 / 251,252 / 351,352 / 451,452 / 551,552 Large Ensembles Semester courses; 3-4 laboratory hours. 1, 1 credit. • Sections: (may be repeated under different section) (1) orchestra, (2) concert band, (3) symphonic band, (4) chorus, (5) university-community chorale. (Auditions required for sections 1, 3, and 4.)

Applied Music 153, 154/253,254 / 353,354 / 453,454 / 553,554 Chamber Music Semester courses; 4 laboratory hours. 1, 1 credit. • A flexible

program designed to involve students in the performance of a wide range of chamber music. Included are conducting and reading experience with the conducting band and chorus in which all chamber music students participate.

Applied Music 155,156 / 255,256 / 355,356 / 455,456 / 555,556

Small Ensemble Semester courses; 3 laboratory hours. 1, 1 credit. Sections: (1) stage band, (2) madrigalists, (3) collegium musicum, (4) jazz-rock band, (5) opera workshop, (6) accompanying, (7) percussion ensemble. (Auditions required for all sections.)

Applied Music 181-182 Class Lessons in Strings Continuous course; 2 laboratory hours. 1-1 credit. • Achievement of performance competencies on violin, viola, cello, or string bass. Acquisition of basic techniques on two additional string instruments.

Applied Music 183-184 Class Lessons in Woodwinds Continuous course; 2 laboratory hours. 1-1 credit. • Achievement of performance competencies on flute, clarinet, oboe, bassoon, or saxophone. Acquisition of basic techniques on two additional woodwind instruments.

Applied Music 185-186 Class Lessons in Brass Continuous course; 2 laboratory hours. 1-1 credit. • Achievement of performance competencies on trumpet, baritone, tuba, trombone, or French horn. Acquisition of basic techniques on two additional brass instruments.

Applied Music 187-188 Class Lessons in Percussion Continuous course; 2 laboratory hours. 1-1 credit. • Achievement of performance competencies on snare drum. Acquisition of basic techniques on xylophone or timpani.

Applied Music 191-192, 291-292 Class Lessons in Piano Continuous course; 2 laboratory hours. 1-1 credit. • Acquisition of performance competencies at the keyboard including finger dexterity, reading, transposing, and improvising.

Applied Music 193-194 Class Lessons in Voice Continuous course; 2 laboratory hours. 1-1 credit. • Acquisition of performance competencies in voice including vocal production, diction, solo, and group performance.

Applied Music 195-196 Class Lessons in Guitar Continuous course; 2 laboratory hours. 1-1 credit. • Acquisition of performance competencies in guitar including chording, single-string technique, plectrum, and finger styles.

Applied Music 197-198 Class Lessons in Organ Continuous course; 2 laboratory hours. 1-1 credit. Prerequisite: consent of instructor. • Achievement of performance competencies in organ including pedal technique, coordination of hands and feet, and registration.

Applied Music 313, 314 Performance Practice Semester courses; 2 lecture and 2 laboratory hours. 3, 3 credits. • A study of performance practices of ornamentation and interpretation of music literature. The first semester treats music from the sixteenth and seventeenth centuries. The second semester treats that of the seventeenth and eighteenth centuries.

Applied Music 381-382 Conducting Year course; 1 lecture and 2 laboratory hours. 2-2 credits. • The student will put in practice his elementary knowledge of conducting to solve complicated or unusual musical situations such as those of irregular meters, conducting from the keyboard, and uncommon scoring.

Applied Music 383,384 Musical Theater Semester courses; 4 laboratory hours. 2, 2 credits. Prerequisite: Applied Music 193 Class Lessons in voice or equivalent. • An exploration of the fundamentals of musical theater including production, staging, and performing. Each course may be repeated for credit three times.

Applied Music 394 Junior Recital No credit. • At least one-half of a recital to be presented publicly and/or project and/or thesis.

Applied Music 413, 414 Performance Practice Semester courses; 2 lecture and 2 laboratory hours. 3,3 credits. • A study of performance practices of ornamentation and interpretation of music literature. The first semester treats music from the eighteenth and nineteenth centuries. The second semester covers that of the nineteenth and twentieth centuries.

Applied Music 463-464 / 563,564 Pedagogy Continuous course; 2 lecture hours. 2-2 credits. • A study of the musical, physiological, and psychological aspects of teaching instruments or voice. Second semester will include practical experience in teaching students under supervision. Section: (1) piano, (2) voice, (3) organ, (4) percussion, (5) brass, (6) woodwinds, (7) strings.

Applied Music 465, 466 Vocal Literature Semester courses; 2 lecture hours, 2, 2 credits. • A survey of the vocal literature of Germany, France, England, and other countries. Students will perform material.

Applied Music 473-474 Improvisation Continuous course; 4 laboratory hours. 2-2 credits. • A course in which, through analysis the student will acquire a knowledge of basic materials which will provide a foundation for improvising or extemporization.

Applied Music 494 Senior Recital No credit. • A complete recital must be presented publicly and/or project and/or thesis.

Church Music 331 Church Music I Semester course; 2 lecture hours. 2 credits. • The organization of multi-choir programs in the church; junior choir methods and materials; handbell choirs.

Church Music 332 Organ Practicum Semester course; 2 lecture hours. 2 credits. • The development of skills necessary for church service playing: transcription of piano and orchestral scores; accompanying and hymn playing; conducting from the console; the accompaniment of chant.

Church Music 333 Organ Design Semester course; 2 lecture hours. 2 credits. • A study of the design and construction of the organ with emphasis on the styles developed by master builders of various eras.

Church Music 431 Hymnology Semester course; 2 lecture hours. 2 credits. • A study of hymns and hymn tunes with emphasis on their development, style, and functions.

Church Music 432 Church Music II Semester course; 2 lecture hours. 2 credits. • A survey of adult choir literature including anthems, cantatas, oratorios, and service music.

Church Music 435 Liturgics Semester course; 2 lecture hours. 2 credits. • A study of the forms of public worship emphasizing the orders in current usage. The planning of weekly and special services.

Church Music 437-438 Field Work in Church Music Continuous course. 1-1 credits. Prerequisite: a position in a church is required for this course. • Actual experience in playing for services and/or conducting a church choir as a steady, regular job, supervised by the instructor.

Music Composition 301 Composition in Small Forms Semester course; 3 lecture hours. 3 credits. Prerequisite: Music Theory 222 or permission of instructor. • The expansion of a brief musical statement into a larger structure with related sections.

Music Composition 302 Composition in Large Forms Semester course; 3 lecture hours. 3 credits. Prerequisite: Music Composition 301. • The composition of works in larger forms involving the development of a musical idea and its integration with others.

Music Composition 313-314 Contrapuntal Techniques Continuous course; 3 lecture hours. 3-3 credits. • Composition and study of devices and methods used to combine two or more simultaneous melodies.

Music Composition 401, 402 Free Composition Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: Music Composition 302. • The composition of music in form and scope according to the needs, and preferences of the student.

Music Composition 403 Composition for the Theater Semester course; 3 lecture hours. 3 credits. Prerequisite: Music Composition 301. • Composition involving the special problems posed by the demands of opera, musical shows, ballet, or other music which is allied with drama or dance.

Music Composition 404 Composition for Modern Popular Media Semester course; 3 lecture hours. 3 credits. • Composition for various facets of popular commercial music.

Music Composition 417-418 / 517-518 Introduction to Electronic Music Continuous course; 2 lecture hours, 2 laboratory hours. 3-3 credits. • A study of laboratory techniques and composing for electronic instruments.

Music Composition 425,426 / 525,526 Projects in Electronic Music Semester courses; 4-12 laboratory hours. 2-6 credits. Prerequisite: permission of the instructor. • Each course may be repeated for a maximum of 12 credits. Completion of selected projects in electronic module design and/or electronic music composition.

Music Education 471 Methods and Materials (Elementary) Semester course; 3 lecture hours. 3 credits. • Curriculum, materials, and procedures for music instruction in the elementary and intermediate grades; supervision as related to the specialist teacher.

Music Education 472 Methods and Materials (Secondary) Semester course; 3 lecture hours. 3 credits. • Curriculum, materials, and procedures as they apply to the development of the music program in the secondary schools. Problems of music administration, scheduling, staff, equipment, finances, and public relations.

Music Education 475/575 Aspects of Popular Music Semester course; 3 lecture hours. 3 credits. • At the completion of the course, the students shall be able to articulate a thoughtful perspective of so-called "Classical Music" and Pop Music, as well as being able to explicate the intellectual, aesthetic, and cultural aspects of this music. No degree credit for music majors.

Music Education 476/576 The Phenomenon of "Rock" Semester course; 3 lecture hours. 3 credits. • After analyzing the formal musical principles and the socio-literary phenomenon of Rock music, as reported in Rock newspapers, books and articles, and record jackets, etc., the student shall be able to offer cohesive and logical evidence, verbally and through position papers which will lead to a clearer definition and understanding of this youth movement. He will also be able to cite, with corroborative evidence, an accurate survey of its historical development.

Music Education 479 Music Instrument Repair Semester course; 2 laboratory hours. 1 credit. • A study of problems related to intonation and tone quality in band and orchestra instruments; the relationship of mouth-pieces and reeds to intonation, emphasis on acquiring knowledge and skill in the care and repair of music instruments.

Music Education 481-482 Music for Elementary Classroom Teachers Continuous course; 3 lecture hours. 3-3 credits. • Development of basic creative and performance competencies and the translation of these competencies into classroom activities.

Music Education 487 Rhythms for Elementary-Aged Children Semester course; 3 lecture hours. 3 credits. • Significant contributions of rhythmic activity to the social, physical, emotional, intellectual, and musical growth of children. Fundamental rhythms, singing songs and games, traditional folk and national dances, creative movement, and the use of practical classroom materials in music education will be presented.

Music Education 488 Music Education Seminar Semester course; 2 lecture hours. 2 credits. • Independent investigation of problems in music education.

Music History 243, 244 Appreciation of Music Semester courses; 3 lecture hours. 3, 3 credits. • Designed to encourage intelligent listening and understanding of finer music from all periods. Not open to music majors.

Music History 245, 246 Introduction to Afro-American Music Semester courses; 3 lecture hours. 3, 3 credits. • An introductory survey of black involvement with the development of music in America from 1607 to the present. Afro-American musical styles will be studied from many aspects, including their African roots and contemporary popular expression.

Music History 401, 402, 403, 404 Senior Seminar in Music History Semester courses; 2 lecture hours. 2, 2, 2, 2 credits. • A course of advanced and in-depth study of selected areas of music history and literature. Class discussion will be based upon intensive background reading and detailed analysis of the materials used.

Music History 421-422/521-522 Survey of Music History Continuous Course; 3 lecture hours. 3-3 credits. • A study of Western music in a historical context from antiquity to the present.

Music History 441/541 American Music Semester course; 2 lecture hours. 2 credits. • The growth and development of music in the United States from 1607 to the present. While the chief concentration will be upon art music and church music, folk music, jazz, and the other forms for popular expression will be included.

Music History 442/542 Twentieth Century Music Semester course; 2 lecture hours. 2 credits. • Impressionistic, expressionistic, neo-classic, and neo-romantic influences and styles of music. Development of new sound generating techniques and methods for ordering the new tonal materials.

Music History 443-444 Music Research Continuous course; 3 lecture hours. 3-3 credits. • Assigned research in aspects of the history of music that are not covered in other courses.

Music Theory 121-122 / 221-222 / 321-322 Literature and Structure of Music Continuous courses; 3 lecture and 6 laboratory hours. 6-6 credits. • A six-semester sequence during which the fundamental precepts of music history, music theory, aesthetics, basic musicianship, and other pertinent elements of the art of Western music are studied. The basis of the study is artistic work from the past and present which embodies characteristics representative of any given historical or technical level; the procedure of the study is deductive—lectures and readings of background materials lead to analysis and performance together with discussions of specific works from which can be inferred the fundamental elements of a particular style. These are then used as guides for creative composition by each student.

Music Theory 201 Acoustics Semester course; 3 lecture hours. 3 credits. • A study of the physical properties of sound and their employment in creating music.

Music Theory 401 Homophonic Harmony I 1450-1750 A.D. Semester course; 3 lecture hours. 3 credits. • An analytical study of music and music writings from early years of Western homophony. Special emphasis placed on figured-bass techniques.

Music Theory 402 Homophonic Harmony II 1750-Present Semester course; 3 lecture hours. 3 credits. Prerequisite: Music Theory 401. • A study of music and writings concerning more recent homophonic styles.

Music Theory 403 Serial Techniques Semester course; 3 lecture hours. 3 credits. • Study and composition of pieces employing serial techniques from Schoenberg to the present.

Music Theory 404 Non-Serial Techniques of the 20th Century Semester course; 3 lecture hours. 3 credits. • A study of the various non-serial devices used in constructing modern music.

Music Theory 405 Theory of Modern Popular Music Semester course; 3 lecture hours. 3 credits. • A study of popular American music during the twentieth century, with special emphasis on improvisatory techniques.

Music Theory 407 Arranging Modern Popular Music Semester course; 3 lecture hours. 3 credits. • Adapting and scoring music for ensembles incorporating popular commercial performance styles.

Music Theory 411/511 Theory Review Semester course; 2 lecture hours. 2 credits. • A review of sixteenth- to twentieth-century musical practices; analysis and composition.

Music Theory 413-414/513-514 Arranging Continuous course; 3 lecture hours. 3-3 credits. • Practical technical and conceptual considerations of arranging and composing for vocal and instrumental groups will be explored. Students will demonstrate competence in these creative areas to the optimum level of school and/or church music organizations.

Music 203 Sight Reading Semester course; 1 lecture hour. 1 credit. • A practical course for singers and instrumentalists designed to develop facility in sight reading.

Music 303-304 Piano Literature Year course; 2 lecture hours. 2-2 credits. • A survey of stringed keyboard literature. Historical, formal, and stylistic considerations of the various periods and composers of keyboard music. Listening and reading assignments included.

Music 334 Organ Literature Semester course; 2 lecture hours. 2 credits. • A survey of organ music.

Music 465 Song Repertoire Semester course; 1 lecture hour. 1 credit. • A survey of the song literature of Germany, France, England, and other countries. Students will perform the material.

Music 466 Opera and Oratorio Repertoire Semester course; 1 lecture hour. 1 credit. • A survey of opera and oratorio literature. Students will be required to perform much of the literature.

COURSES IN PAINTING AND PRINTMAKING

Open to non-arts majors by permission of the department chairman.

Painting and Printmaking 205-206 Painting, Basic Composition Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • First semester: an introduction to the use of paints with an emphasis on the organization of the artistic image, through the use of plastic form and color. Second semester: intensification of painting problems coupled with analysis of historical and contemporary works.

Painting and Printmaking 207 Materials: Painting Semester course; 1 lecture and 6 studio hours. 3 credits. • An in-depth investigation of tradi-

tional and contemporary painting materials with particular emphasis on developing technical facility.

Painting and Printmaking 209 Materials: Printmaking Semester course; 1 lecture and 6 studio hours. 3 credits. • A historical examination of the processed image with a technical survey of print media in screen printing, lithography, and etching.

Painting and Printmaking 221-222 Drawing, Basic Continuous course; 9 studio hours. 3-3 credits. • Drawing instruction with attention to extension of the student's knowledge of the tools of drawing. Materials and techniques will be related to pictorial organization.

Painting and Printmaking 305-306 Painting, Intermediate Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • Primary emphasis on the development of an individual direction in the context of contemporary ideas and images in painting.

Painting and Printmaking 315-316 Printmaking, Intermediate (Planographics) Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • Investigation of techniques and technical printing problems in planographic printing processes from stones and plates.

Painting and Printmaking 317-318 Printmaking, Intermediate (Intaglio) Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • Investigation of intaglio printmaking; drypoint, etching, engraving, aquatint, soft grounds, and related techniques.

Painting and Printmaking 319-320 Printmaking, Intermediate (Screen-printing) Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • An investigation of cut, hand-drawn, and photographic stencil techniques and printing on a variety of surfaces.

Painting and Printmaking 321-322 Drawing, Intermediate Continuous course; 9 studio hours. 3-3 credits. • Drawing for advanced students with special emphasis on creative response to the drawing as a work of art.

Painting and Printmaking 405-406 Painting, Advanced Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • More ambitious projects with the aim of developing in the senior student a highly professional approach and achievement in his work: Individual as well as group discussions.

Painting and Printmaking 407-408 Painting, Advanced, II Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • Advanced painting with emphasis on the direction of the individual student's creative work and his ability of problem solving.

Painting and Printmaking 409-410 Painting, Advanced, III Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • Advanced painting dealing with personal concepts developed by the student's own investigations.

Painting and Printmaking 415-416 Printmaking, Advanced (Planographic) Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • Specializa-

tion in one medium with emphasis upon technical research and aesthetic suitability of the design to the particular medium used.

Painting and Printmaking 417-418 Printmaking, Advanced (Etching) Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • Further investigation of intaglio printmaking with specialization in one medium.

Painting and Printmaking 419-420 Printmaking, Advanced (Screenprinting) Continuous course; 2 lecture and 6 studio hours. 4-4 credits. • Further exploration of cut, hand-drawn, and photographic stencil techniques and printing on a variety of surfaces.

Painting and Printmaking 421-422 Drawing, Advanced Continuous course; 9 studio hours. 3-3 credits. • A studio for drawing with individual criticism. Special attention is given to contemporary concepts.

COURSES IN PHOTOGRAPHY

Photography 243-244 Basic Photography Continuous course; 1 lecture and 2 studio hours. 2-2 credits. • Study of the fundamental techniques of the camera and photographic processes for expressive possibilities in relation to the field of visual communication. Adjustable camera required.

Photography 301-302 Basic Photo-Journalism Continuous course; 2 lecture and 2 laboratory hours. 3-3 credits. • Study of fundamentals of photography and techniques of camera use in relation to the fields of journalism and visual communications. Adjustable camera required.

Photography 325-326 The Zone System Continuous course; 3 lecture hours, 3-3 credits. • Prerequisite: Photography 243-244 or consent of instructor. • Lectures emphasizing the testing of cameras, lens, films, and printing to develop a pre-visualization individual creative approach to image making.

Photography 345-346 Intermediate Photography Continuous course; 1 lecture and 2 studio hours. 2-2 credits. Prerequisite: Photography 243-244. • Class problems in advanced photographic techniques. Emphasis is placed on individual solutions to various photographic problems.

Photography 445-446 Advanced Photography Continuous course; 2 lecture and 3 studio hours. 3-3 credits. Prerequisite: Photography 345-346. • A workshop course dealing with various color processes and emphasis centered on developing a portfolio of professional work.

COURSES IN SCULPTURE

Sculpture 209, 210 Introduction to Sculpture Semester course; 2 lecture and 3 studio hours. 3, 3 credits. • The course will offer an opportunity for students to work with some of the ideas and materials of sculpture through slides, lecture, and studio involvement.

Sculpture 211, 212 Sculpture, Basic Semester course; 2 lecture and 6 studio hours. 4-4 credits. • Basic sculptural concepts are introduced which acquaint the student not only with traditional materials and tech-

niques but also with plastics, metals, and their fabrication. Introduction is made to the utilization of shops, tools foundry, and casting. School of the Arts majors only.

Sculpture 217, 218 Sculptural Concepts Semester course; 3 lecture hours. 3,3 credits. No prerequisites. • A study of contemporary technology, philosophy, criticism, and their relation to material resources and technical practices.

Sculpture 311, 312 Sculpture, Intermediate Semester course; 2 lecture and 6 studio hours. 4, 4 credits. • Work in a great variety of materials and ideas; also experimenting with media such as plastics and special techniques. Emphasis on direct work and creative independence. School of the Arts majors only.

Sculpture 313, 314 / 413, 414 Dimensional Concepts Semester courses; 2 lecture and 6 studio hours. 4, 4 credits. Prerequisite: permission of instructor. • Opportunities for sculptors to examine diverse situations as an extension of the more traditional concept of material object-making.

Sculpture 411, 412 Sculpture, Advanced Semester course; 2 lecture and 6 studio hours or 3 lecture and 9 studio hours. 4 or 6 credits. • Emphasis on large sculpture and advanced techniques. Development of the individual's personal style is encouraged. School of the Arts majors only.

COURSES IN THEATRE

Theatre 101-102 Speech for the Stage I Continuous course; 3 lecture hours. 3-3 credits. • Drills in pronunciation, enunciation, and voice placement for performing. Open only to theatre majors.

Theatre 105-106 Movement for the Stage I Continuous course; 3 lecture hours. 3-3 credits. • A practicum in elementary movement involving gymnastics and basic dance. Open only to theatre majors.

Theatre 111 Introduction to Theatre Semester course; 3 lecture hours. 3 credits. • Survey of the basic elements and theories of theatrical production; directing and design with special consideration of theatre as an artistic experience.

Theatre 113 Performing Semester course; 3 lecture hours. 3 credits. • An exploration of the general process of performing involving theatre games, role playing, and improvisation. Open only to theatre majors.

Theatre 114 Performing Environment Semester course; 3 lecture hours. 3 credits. • An exploration of the various scenic environments and conditions for performing. Open only to theatre majors.

Theatre 123, 124 Production Crew Semester courses; 3 lecture hours. 1-3 credits. • Production work in one or more of the following areas; set construction, costume construction, lighting, properties, house management, publicity, and sound.

Theatre 201-202 Speech for the Stage II Continuous course; 3 lecture hours. 3-3 credits. • Advanced study and practice in the use of the voice

to include dialects, verse drama, and choral speaking. Open only to theatre majors.

Theatre 203, 204 History of the Theatre Semester courses; 3 lecture hours. 3, 3 credits. • A survey course beginning with the Greek theatre and studying the major developments of the play, the actor, and the acting area, ending with Ibsen.

Theatre 205-206 Movement for the Stage II Continuous course; 3 lecture hours. 3-3 credits. • A practicum in dance, period movement, stage combat, and circus games. Open only to theatre majors.

Theatre 211, 212 Introduction to Drama Semester courses; 3 lecture hours. 3, 3 credits. • Analysis and critical examination of plays for methods of interpretation and production qualities. Open only to theatre majors.

Theatre 213-214 Acting Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Theatre 113, 114. • A study of the emotional basis of acting and of the body as the expressing agent. Open only to theatre majors.

Theatre 221, 222 Basic Scene Design Semester courses; 3 lecture hours. 3, 3 credits. • A study of the basic techniques used in designing space for theatre productions.

Theatre 223-224 Practicum in Theatre Technology Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Theatre 123-124. • Advanced problem solving in one or more areas of technical theatre.

Theatre 225-226 Basic Stage Electronics Continuous course; 3 lecture hours. 3-3 credits. • A study of the basic techniques utilized to light space and create and use sound for theatre productions.

Theatre 227-228 Basic Stage Costuming and Makeup Continuous course; 3 lecture hours. 3-3 credits. • A study of the techniques used to dress the performer.

Theatre 251, 252/Theatre 351, 352/Theatre 451, 452 Rehearsal and Performance Semester courses; hours arranged. 1 to 3 credits. • Work in acting and production in a major production and one-act theatre. Each student is expected to devote a minimum of 50 hours per credit per semester to receive credit.

Theatre 303 Black Theatre Semester course; 3 lecture hours. 3 credits. • A study of the major developments in the evolution of black theatre through readings and studio performances in black related and black theatre dramaturgy. (Taught with Afro-American Studies 303.)

Theatre 305, 306 Scene Design Semester courses; 1 lecture and 4 laboratory hours. 3, 3 credits. Prerequisite: Theatre 221, 222; permission of instructor. • A study of the techniques and methods of scenic design and scene painting, with practical application in major productions and one-act theatre.

Theatre 309, 310 History of Costume Semester courses; 3 lecture hours. 3, 3 credits. • Illustrated lectures on the history of costume from primitive times to the present.

Theatre 313-314 Actor's Studio Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: permission of instructor. • A laboratory for the serious students of acting in which the participants will prepare and polish various longer scenes for presentation and criticism. Open only to theatre majors.

Theatre 319-320 Play Production Continuous course; 3 lecture hours. 3-3 credits. • Principles of theatre art, including scenic and costume design, technical theatre, and direction. This course is for theatre education majors.

Theatre 323-324 Practicum in Advanced Theatre Technology Continuous course; 6 studio hours. 3-3 credits. Prerequisite: permission of instructor. • Advanced problem solving in technical theatre, with special emphasis on multimedia and new design materials.

Theatre 330-331/Theatre 430-431/Theatre 530-531 Production Continuous course; 15 laboratory hours. 5-5 credits. • The design, rehearsal, and performance of dramatic works. Open only to theatre majors.

Theatre 335-336/Theatre 435-436/Theatre 535-536 Colloquium and Practical Training Continuous courses; 3 lecture and 6 laboratory hours. 5-5 credits. • Literary, historical, and theoretical studies together with specialized voice and movement training related to dramatic works in production. Open only to theatre majors.

Theatre 340-341/Theatre 440-441/Theatre 540-541 Theatre Projects Continuous course; 15 laboratory hours. 5-5 credits. • Individual or group problem solving through performance projects in an area of dramatic literature or experience related to works under production in Theatre 330-331/Theatre 430-431. Open only to theatre majors.

Theatre 361-362 Directing Continuous course; 3 lecture hours. 3-3 credits. • Lectures and discussions on the theories of stage direction; problems involved in the production of period plays and a study of modern theories; actual practice under supervision in directing one-act plays for public presentation. Open only to theatre majors.

Theatre 403, 404/Theatre 503, 504 History of Dramatic Literature Semester courses; 3 lecture hours. 3, 3 credits. • Study and analysis of dramatic literature. First semester: Aeschylus through Shakespeare. Second semester: Corneille to Ibsen.

Theatre 405-406/Theatre 505-506 Advanced Scene Design Continuous course; 1 lecture and 4 laboratory hours. 3-3 credits. Prerequisite: Theatre 305, 306 or permission of instructor. • A more advanced study of the techniques, methods, and problems of scene design and scene painting. Designed for the student who plans to attend graduate school or enter the profession.

Theatre 407/Theatre 507 Advanced Scenic Technique Semester course; 1 lecture and 4 studio hours. 3 credits. Prerequisite: permission of instructor. • An intensive involvement in contemporary theory and practice of scenic techniques with special emphasis on European production techniques.

Theatre 409-410/Theatre 509-510 Costumes for the Theatre Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: permission of instructor. • A seminar in research and design of costumes for the theatre, including discussion of fabrics and special construction methods used in stage costuming. Special project in construction will be assigned as part of the work for the course.

Theatre 413-414/Theatre 513-514 Acting Styles Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: permission of instructor. • A study of the history and theory of acting styles from the Greeks to the present. Designed for students who wish to enter the acting profession or to attend graduate school.

Theatre 415, 416/Theatre 515, 516 Creative Dramatics Semester courses; 3 lecture hours. 3, 3 credits. • A study of the theory of creative dramatics as it applies to elementary and secondary school education; laboratory exercise in the application of these theories to classroom processes.

Theatre 417, 418 Children's Theatre Semester courses; 9 laboratory hours. 3, 3 credits. Prerequisite: permission of instructor. • A practicum in children's theatre. Students will be required to work in one or more of the following areas: performance, directing, design, technical theatre, and management. The courses will include mounting and touring of children's theatre productions.

Theatre 420 Senior Seminar Semester courses; 3 lecture hours. 3 credits. Prerequisite: permission of instructor. • Research and/or creative project in the drama major's area of special interest pursuant to graduate study or professional work in the student's chosen field.

Theatre 423, 424/Theatre 523, 524 Modern Drama Semester courses; 3 lecture hours. 3, 3 credits. • Intensive study of major continental and American plays.

Theatre 425 Theatre Administration Semester course; 3 lecture hours. 3 credits. • The business aspects of successful theatre operation—college, commercial, community, regional—from basic purchasing methods to publicity and "house" operation for the finished product.

Theatre 426, 427/Theatre 526, 527 Playwriting Semester courses; 3 lecture hours. 3, 3 credits. • A practical introduction to the creation of original play scripts for theatre, television, and motion pictures. Readings and studio performances of works in progress and completed scripts. (Same as English 426, 427).

Theatre 450, 451 Professional Internship Semester courses, 3-9 credits. • A practicum in theatre conducted in cooperation with selected professional or semi-professional theatre organizations.

Theatre 461, 462/Theatre 561, 562 Advanced Directing Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: Theatre 361-362. • Further study in direction techniques, especially the problems of the full-length play.

COURSES IN SPEECH

Speech 121 Effective Speech Semester course; 3 lecture hours. 3 credits.

• Practice in organization and delivery of various types of speeches. Learning how to think clearly and to speak effectively before an audience.

Speech 301 Beginning Oral Interpretation Semester course; 3 lecture

hours. 3 credits. • The basic techniques of oral interpretation will be introduced. Performance will include the reading of prose, poetry, and dramatic literature. Written permission of the instructor must be obtained by any student outside the department who wishes to take the course.

Speech 408/Speech 508 Speech for Teachers Semester course; 3 lecture

hours. 3 credits. • The aim of this course is to make the prospective teacher aware of his own speech and the speech practices of his pupils. Proper voice placement to avoid needless fatigue and good pronunciation as well as problems of oral communication are stressed.

Speech 401, 402 Oral Interpretation Semester courses; 3 lecture hours.

3, 3 credits. • Principles and practice in analysis and reading of sections from prose, poetry, and drama.

Speech/Theatre 407, Speech/Theatre 507 Speech and Theatre Methods

Semester course; 3 lecture hours. 3 credits. • A study of the basic methods used in the teaching of theatre and speech in the secondary school.

PART VII—SCHOOL OF ARTS AND SCIENCES

PAUL D. MINTON, Dean

ALBERT M. LYLES, Associate Dean

LEWIS C. GOLDSTEIN, Assistant Dean

JOHN H. BORGARD, Assistant Dean

C.A.B. FOSTER, Assistant to the Dean

DEPARTMENTS AND CURRICULA

Undergraduate Degree Programs

The School of Arts and Sciences offers the baccalaureate degree in 13 areas: biology, chemistry, English, French, history, mass communications, mathematical sciences, philosophy, political science, physics, psychology, science, (interdisciplinary), and sociology and anthropology. Information concerning curricula is given in the respective departmental sections.

Graduate Studies

Master's degree programs are offered in biology, chemistry, mathematical sciences, psychology, and sociology and anthropology. Doctorate programs are available in chemistry and clinical psychology. For details about these graduate programs, see the School of Arts and Sciences **Graduate Bulletin**.

Preparation for Professional Studies

In addition to its mission of providing studies in liberal arts at the undergraduate and graduate levels, the School of Arts and Sciences offers undergraduate preparatory programs and advising for the following areas: medicine, dentistry, veterinary medicine, law, dental hygiene, medical technology, nursing, occupational therapy, pharmacy, physical therapy, and radiologic technology.

The specific curricula descriptions are listed on pages 148-156 in the School of Arts and Sciences section of this bulletin.

STUDENT ADVISING

An integral part of the program in the School of Arts and Sciences is individual student advising. Each freshman, transfer student, and readmitted student is assigned a faculty advisor by the department in which the student intends to major. Students admitted in the "undecided" category will be assigned advisors by the assistant dean.

Through consultation with his advisor and/or the dean, and frequent references to this bulletin, the student has the responsibility to make certain that the courses he selects satisfy graduation requirements set forth in his departmental major program, in the General Requirements of the School of Arts and Sciences, and in the general degree requirements of the Academic Campus.

The students should also be familiar with the academic regulations of the Academic Campus concerning other academic regulations, change of major, continuance, etc., as expressed in Section V of this Bulletin.

GRADUATION REQUIREMENTS

There are three areas of requirements which the student must complete for graduation: requirements which all graduates of the Academic Campus must fulfill; requirements which all students in the School of Arts and Sciences must fulfill; and requirements of the area of study in the School of Arts and Sciences in which the student majors.

Academic Campus Requirements

Listed below are the Academic Campus graduation requirements which apply to arts and sciences students. The student should consult page 68 of this bulletin for other university policies which may affect his graduation.

1. **Degree Program.** An overall grade point average (GPA) of at least 2.00 (a "C" average) is required on all work presented for graduation for either an associate or bachelor's degree.
2. **Total Credits Required.** A total of 124 semester credits is required for completion of either the bachelor of arts degree or the bachelor of science degree in the School of Arts and Sciences.

3. **Major Concentration.** An overall grade point average of at least 2.0 is required in the VCU courses that comprise the student's major.
4. **Transfer Students.** Transfer students are required to earn an overall grade point average of at least 2.0 on all courses attempted at VCU which are to be presented for graduation for either an associate or bachelor's degree at the university.
5. **Upper Level Courses.** A minimum of 45 credits are required in courses numbered 300 and 400 for bachelor's degrees. Credits transferred from two-year institutions may not be used for upper level requirements.
6. **Resident Requirement.** Applicants are required to complete the last 30 credits at this institution for either an associate or bachelor's degree.
7. **Semester Credit Limitation.** A student who fails to meet degree requirements in any program after attempting a total of 150 semester credits will be denied further attendance unless he has the expressed approval of the Academic Status Committee. Attendance at other colleges will be equated on the basis of the number of semester credits accepted toward the degree program.

General Requirements of the School of Arts and Sciences for the Degree of Bachelor of Arts

The general requirements listed below apply to the following degree programs: chemistry, English, French, history, philosophy, and political science.

Including the Academic Campus graduation requirements listed above and those on page 68, a minimum of 124 credits, no more than four of which may be in physical education (activities), is required. Courses numbered in the 100 and 200 series comprise the lower division offerings and are open to freshmen and sophomores; courses numbered in the 300 and 400 series comprise the upper division offerings and are generally open to juniors and seniors. (Specific courses designated by a department to fulfill one or more of the School of Arts and Sciences general requirements are listed under the Degree Requirements section of the particular department.) The credits are to be distributed as follows:

1. **English** Four courses, including 12 credits
 - A. English 101-102. Composition and Rhetoric
 - B. English Electives. Two courses to be taken above the 100 level.
2. **Mathematics* or Logic** Any one of the following 6 credits
 mathematical sciences options or the logic sequence: or less
 - A. Mathematics 101-102. College Algebra and Trigonometry

*No more than six credits may be earned in mathematics courses numbered below the 200 level.

- B. Mathematics 113-114. Survey of Finite Mathematics, or Mathematics 113. Survey of Finite Mathematics and Statistics 213. Introduction to Statistics.
- C. Mathematics 107. Algebra and Trigonometry or Statistics 213. Introduction to Statistics (Any of these courses or a higher level mathematics or statistics course as determined by the Mathematics Placement Test fulfills the total requirement.)

OR

- D. Philosophy 221, 222, Informal and Formal logic
3. **Foreign Language** Completion of a foreign language through the intermediate level (course 202). 14 credits
or less
- A. Freshmen who wish to continue in their high school language will be given a placement test to determine the level at which they will begin language study for credit. Students desiring to begin study of a different language need not take the placement test and may begin with the elementary course in that language for credit.
 - B. Students transferring from other colleges and universities with advanced placement or advanced standing in foreign language will receive credits as granted by the institution from which they are transferring. Transfer students who wish to continue in their college language must take the Language Placement Test. Transfer students who have not begun language study at the collegiate level and who wish to continue study of their high school language are subject to the provisions of the previous paragraph.
 - C. New freshman and transfer students who qualify through the intermediate level (course 202) of a foreign language on the placement test receive no semester credit for such placement but have satisfied the language requirement.
4. **History** Four courses from one of the following options: 12 credits
- A. History 101, 102. History of Civilization and (1) History 201,202. American History **or** (2) Two upper-level European, African, Asian, **or** Latin American history courses.
 - B. History 103, 104. History of Modern Europe and (1) History 201, 202. American History **or** (2) Two upper-level European, African, Asian, **or** Latin American history courses.

- C. History 201, 202. American History and
 (1) History 101, 102. History of Civilization **or**
 (2) History 103, 104. History of Modern
 Europe **or**
 (3) Two upper-level American history courses.
5. **Laboratory Science** This requirement may be fulfilled from the following courses: 8 credits
- A. Biology 101-102. General Biology and Biology L101, L102. General Biology Laboratory I, II;
 B. Biology 101, L101. General Biology and Laboratory I and one four-credit biology elective;
 C. Chemistry 101-102. General Chemistry and Chemistry L101, L102. General Chemistry Laboratory I, II;
 D. Chemistry 103-104. Introduction to Modern Chemistry and Chemistry L103, L104 Introduction to Modern Chemistry Laboratory I, II;
 E. Physics 107-108. Physical Science;
 F. Physics 201-202. General Physics;
 G. Physics 207, 208. University Physics I, II.
6. **Humanities Electives** Two courses from these suggested areas; art (non-studio), Humanities 295, literature (including foreign literature in English translation and upper division foreign language courses), music (non-studio), philosophy, religious studies. 6 credits
7. **Social Sciences Electives** Two courses from these suggested areas: Afro-American studies, anthropology, economics, geography, history, Mass Communications 101, political science, psychology, Social Science 295. sociology. 6 credits
8. **Major** (minimum) 30 credits
9. **Approved Electives** (as approved by the major department). 23 credits
10. **Free Electives** (taken at VCU only). 9 credits

General Requirements of the School of Arts and Sciences for the Degree of Bachelor of Science

The general requirements listed below apply to the following degree programs: biology, chemistry, mass communications, mathematical sciences, physics, psychology, science, and sociology and anthropology.

Including the Academic Campus graduation requirements listed above and those on page 68, a minimum of 124 credits, no more than four of which may be in physical education (activities), is required. Courses numbered in the 100 and 200 series comprise the lower division offerings and

are open to freshmen and sophomores; courses numbered in the 300 and 400 series comprise the upper division offerings and are generally open to juniors and seniors. (Specific courses designed by a department to fulfill one or more of the School of Arts and Sciences General Requirements are listed under the Degree Requirements section of the particular department.) The credits are to be distributed as follows:

- | | |
|--|-------------------|
| 1. English Four courses, including | 12 credits |
| A. English 101-102. Composition and Rhetoric | |
| B. English Electives. Two courses to be taken above the 100 level. | |
| 2. Mathematics* Two courses (See appropriate departmental listing for specific mathematics requirement.) | 6 credits or less |
| 3. Foreign Language or Computer Science Any one of the following foreign language options or the computer science sequence: | 8 credits or less |
| A. Foreign Language—Completion of a foreign language through the elementary level (Course 102) | |
| 1) Freshmen who wish to continue in their high school language will be given a placement test to determine the level at which they will begin language study for credit. Students desiring to begin study of a different language need not take the placement test and may begin with the elementary course in that language for credit. | |
| 2) Students transferring from other colleges and universities with advanced placement or advanced standing in foreign language will receive credits as granted by the institution from which they are transferring. Students who wish to continue in their college language must take the Language Placement Test. Transfer students who have not begun language study at the collegiate level and who wish to continue study of their high school language are subject to the provisions of the previous paragraph. | |
| 3) New freshmen and transfer students who qualify through the elementary level (Course 102) of a foreign language on the placement test receive no semester credit but have satisfied the language requirement. | |

OR

- B. **Computer Science**—Two courses

*No more than six credits may be earned in mathematics courses numbered below the 200 level.

- | | |
|---|------------|
| 4. Laboratory Science Full year in one science other than the major. (See appropriate departmental listing for specific requirement.) | 8 credits |
| 5. Humanities Electives Two courses from these suggested areas: art (non-studio), Humanities 295, literature (including foreign literature in English translation and upper division foreign language courses), music (non-studio), philosophy, religious studies. | 6 credits |
| 6. Social Sciences Electives Two courses from these suggested areas: Afro-American studies, anthropology, economics, geography, history, Mass Communications 101, political science, psychology, Social Science 295, sociology. | 6 credits |
| 7. Major (minimum) | 30 credits |
| 8. Approved Electives (as approved by major department). | 41 credits |
| 9. Free Electives (taken at VCU only). | 9 credits |

Major Requirements

The student should consult the departmental descriptions in the School of Arts and Sciences section of this bulletin for the specific major requirement.

UNDECIDED STUDENT AND RECOMMENDED COURSES OF STUDY

Though many students are able to declare a major upon admission to the School of Arts and Sciences, other students may find that an "exploratory" program may best fill their needs for the first few semesters. The undecided student and his faculty advisor will assess the general academic direction of the student's interests and plan a program of studies to assist the student to define his academic objectives more clearly.

The student should attempt to declare a regular major no later than the semester in which he will complete his sixty-second credit (approximately two years).

Below are stated general courses of study for freshman and sophomore years in the bachelor of arts and the bachelor of science degree programs. As the undecided student begins to make a decision about a major, he should consult the specific major requirements in the School of Arts and Sciences section of the bulletin for courses which should be taken in the freshman and sophomore years. Students preparing for study in a particular health sciences area should follow the specific curriculum for that area.

Bachelor of Arts

<i>Freshman Year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>	<i>Sophomore Year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>
English 101-102 ..	3	3	English Electives ..	3	3
Mathematics			Humanities		
or			Electives	3	3
Logic	3	3	Social Science		
Laboratory			Electives	3	3
Science	4	4	Foreign Language .	3	3
Foreign			History Electives ..	3	3
Language	3-4	3-4			
History Electives ..	3	3		15	15
	16-17	16-17			

Bachelor of Science

<i>Freshman Year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>	<i>Sophomore Year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>
English 101-102 ...	3	3	English Electives ..	3	3
Language			Humanities Electives		
or			or		
Computer			Mathematics	3-4	3-4
Science	3-4	3-4	Social Science		
Mathematics	3	3-4	Electives		
Laboratory			or		
Science	4	4	Laboratory		
Approved or Free			Science	3-4	3-4
Elective			Major Course	3-4	3-4
or			Approved		
Major Course	3	3	Electives	3	3
	16-17	16-18		15-18	15-18

UNDERGRADUATE CREDIT BY EXAMINATION

Recognizing that Virginia Commonwealth University enrolls students of varying backgrounds and experiences, the School of Arts and Sciences provides its students the opportunity to accelerate their education through "credit by examination." Students who feel that they have gained proficiency in a selected area may petition the department in the School of Arts and Sciences offering a course covering that area for permission to take an examination designed especially for the student seeking credit by examination.

The conditions under which credit by examination may be taken and the procedure for doing so are outlined below.

1. Examinations for credit in courses offered by the School of Arts and Sciences may be taken in the fall or spring semester of the regular academic year and during the Summer Sessions by any currently enrolled student.

2. No one may take an examination for a course in which he has received transfer credit or in which he has received a "D" grade at VCU.
3. Each department shall determine which of its courses, if any, may be taken by examination and the eligibility or qualifications of the student to take a specific examination.
4. The grades of "A, B, C, D, or F" shall be recorded on the student's permanent record. Hours attempted, hours earned, and quality points will be added to the student's permanent record. The course will be used in computation of the student's grade point average and credits used for graduation.
5. No student shall receive credit by examination for lower level foreign language courses in his native language.
6. The charge for credit by examination is \$5 per credit.
7. The procedure for authorizing and conducting credit by examination shall be as follows:
 - A. A student who wishes to qualify for credit by examination shall apply to the registrar for a Credit by Examination Approval Form. The registrar shall certify that the student is currently enrolled. Application for credit by examination must be made within the first four weeks of any semester of the regular academic year or during the first week of any of the regular summer session.
 - B. The certified approval form must be signed by the chairman of the student's major department and the chairman of the department offering the course. When all approvals are granted, the student shall pay the specified charge in the Cashier's Office, Room B6 of the Administration Building.
 - C. The department shall determine the content of the examination and the readers for the examination. The student shall take the examination within two weeks of the date of departmental approval. No student shall be permitted to take more than two examinations in one day.
 - D. After the examination is completed, the chairman of the department giving the examination shall record the grade on the approval form and transmit it to the registrar for posting on the permanent record.

ASSOCIATE IN ARTS DEGREE—TWO-YEAR PROGRAM IN LIBERAL ARTS

John H. Borgard, Advisor

A two-year program in liberal arts, leading to the degree of associate in arts, aims to meet the needs of those students who expect to attend college two years only or who intend to transfer to one of the four-year programs offered by the School of Arts and Sciences. Students enrolled in this curricu-

lum may also qualify for transfer without loss of credit to certain of the degree programs offered in the School of Education and the School of Community Services, and the School of Business.

Students who complete the curriculum outlined below with a grade average of "C" or better may, upon application, be awarded the degree of associate in arts.

Degree Requirements

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
English 101-102. Composition and Rhetoric	3	3
Foreign Language	3-4	3-4
History Electives (100 or 200 level)	3	3
Laboratory Science	4	4
Mathematics 101-102. College Algebra and Trigonometry or Mathematics 113-114. Survey of Finite Mathematics or Higher Level Mathematics or Statistics or Philosophy 221, 222. Informal and Formal Logic	3	3
	16-17	16-17
<i>Second Year</i>		
English Electives	3	3
Foreign Language or Approved Electives	3	3
Six courses (18 credits) from the following or Other Approved Electives	9	9
Afro-American Studies		
Anthropology		
Art (non-studio)		
Economics		
Foreign Languages		
Geography		
History		
Humanities 295		
Mass Communications		
Mathematics		
Music (non-studio)		
Philosophy		
Physical Education (a maximum of 2 credits)		
Political Science		
Psychology		
Religious Studies		
Social Science 295		
Sociology		
	15	15

BIOLOGY

RUSSELL V. BROWN, Chairman of the Department

JACKSON E. JEFFREY, Assistant to the Chairman

Charles R. Blem / Leann B. Blem / Joseph P. Chinnici / William V. Dashek
Lewis C. Goldstein / Miles F. Johnson / T. Daniel Kimbrough, Jr.
Gerald C. Llewellyn / Margaret L. May / Edward R. Meyer
Richard R. Mills / Susan M. Moyle / John F. Pagels / Ronald D. Parker
James R. Reed, Jr. / John D. Reynolds / Walter L. Richards, Jr.
Gene L. Samsel, Jr. / Arthur J. Seidenberg / John M. Sharpley

OBJECTIVES The Department of Biology, sensitive to the needs of urban life in the Commonwealth of Virginia, endeavors to provide a multi-streamed comprehensive program of excellence available to all qualified citizens; an academic atmosphere conducive to superior instruction, research, and scholarly activities; career training, pre-professional training, and continuing education; service courses for other departments; and graduate work leading to higher academic degrees.

The Department of Biology offers two degree programs:

1. Bachelor of science in biology.
2. Bachelor of science in biology education, conferred through the School of Education.

In addition the department offers required and elective courses in biology for students in other programs of study as well as for those majoring in biology.

Pre-Professional Study for the Health Professions The bachelor of science in biology program provides an excellent four-year course of study in preparation for medical or dental school. It is important that such a program be planned carefully with advisors at the beginning of the freshman year.

Master of Science in Biology For information about the graduate program in biology, see the School of Arts and Sciences **Graduate Bulletin**.

Degree Requirements

Bachelor of Science in Biology The bachelor of science curriculum in biology requires a minimum of 124 credits, including 36 credits in biology. Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree listed on pages 68 and 121, the following courses are required and the indicated sequence is recommended:

Freshman Year Biology 101, L101. General Biology and Laboratory I, and one four-credit biology elective; Mathematics 101-102. College Algebra and Trigonometry or Mathematics 107, 200. Algebra and Trigonometry, and Calculus with Analytic Geometry.

Sophomore Year Two biology electives; Chemistry 101-102. General Chemistry and Chemistry L101, L102. General Chemistry Laboratory I, II; and Physics 201-202. General Physics.

Junior Year Two biology electives; Chemistry 301-302. Organic Chemistry and Chemistry L301, 302. Organic Chemistry Laboratory I, II.

Senior Year Three biology electives.

Biology Electives

The biology elective courses must be chosen from the following categories so that there will be a minimum of 3 credits from each of the four areas indicated. Biology 497. Independent Study may be elected as a second course in any of the four areas. Biology courses not listed below cannot be applied toward the major requirements.

Botany

- 207—Survey of the Plant Kingdom
- 208—Biology of the Seed Plant
- 304—Mycology
- 409—Plant Anatomy
- 410—Plant Taxonomy
- 411—Summer Flora
- 418—Plant Ecology
- 462—Comparative Morphology of Vascular Plants
- 470, 471—Selected Topics in Botany

Biology

- 200—Biological Terminology
- 310—Genetics
- 400—Ecology
- 412—Radiation Biology
- 414—Aquatic Ecology
- 422—Evolution and Speciation
- 440—Quaternary Paleoecology

Zoology

- 201—Vertebrate Morphology
- 202—Vertebrate Embryology
- 204—Invertebrate Zoology
- 308—Vertebrate Histology
- 309—Entomology
- 313—Vertebrate Natural History
- 403—Biology of the Fishes
- 413—Parasitology
- 416—Ornithology
- 417—Mammalogy
- 435—Herpetology
- L436—Laboratory in Herpetology

Cellular Biology

- 303—Bacteriology
- 311—General Physiology
- 318—Cell Biology
- 401—Industrial Microbiology
- 405—Bacterial Physiology
- 420—Plant Physiology

Bachelor of Science in Biology Education The bachelor of science in biology education curriculum requires a minimum of 124 credits, including 32 credits in biology. For the B.S. program in biology education, see page 281 under the listings of the Department of Secondary Post/Secondary Education, School of Education.

CHEMISTRY

LAWRENCE J. WINTERS, Chairman of the Department

Dale E. Arrington / Robert G. Bass / Helen M. Gager / George C. Grant
 Mary E. Kapp (Professor Emerita) / John F. Lefelhoc
 Raphael M. Ottenbrite / Donald D. Shillady / Junaid A. Siddiqui
 Stuart J. Silvers / B. L. Stump

OBJECTIVES The purpose of the curriculum in chemistry is to prepare students for graduate study in chemistry; for teaching in secondary schools; for employment in chemical and industrial laboratories and in related fields of business and industry; and for admission to schools of medicine, dentistry, and veterinary medicine.

The Department of Chemistry offers three degree programs:

1. Bachelor of science in chemistry. This program is approved by the American Chemical Society Committee on Professional Training. Upon satisfactory completion of the degree, the student is certified by the American Chemical Society.
2. Bachelor of arts in chemistry. The program allows the student to follow a curriculum in chemistry with more opportunity for electives.
3. Bachelor of science in chemistry education, conferred through the School of Education.

In addition, the department offers required and elective courses in chemistry for students in other programs of study as well as for those majoring in chemistry.

Pre-Professional Study for the Health Professions The bachelor of science or bachelor of arts in chemistry programs, with the proper selection of electives, satisfy admission requirements to most schools of medicine or dentistry.

Master of Science and Doctoral Program in Chemistry For information about these programs in chemistry, see the School of Arts and Sciences Graduate Bulletin.

Degree Requirements

Bachelor of Science in Chemistry The bachelor of science in chemistry curriculum requires a minimum of 124 credits, including 39 credits in chemistry. Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree listed on pages 68 and 121, the following courses are required, and the indicated sequence is recommended:

Freshman Year Chemistry 101-102. General Chemistry and Chemistry L101, L102. General Chemistry Laboratory I, II; Mathematics 107, 200. Algebra and Trigonometry, and Calculus with Analytic Geometry; six-to-eight credits in computer science or approved foreign language. (German recommended).

Sophomore Year Chemistry 202. Quantitative Analysis; Chemistry 301-302. Organic Chemistry and Chemistry L301, L302. Organic Chemistry Laboratory I, II; Mathematics 201-202. Calculus with Analytic Geometry; Physics 207, 208. University Physics I, II.

Junior Year Chemistry 303. Physical Chemistry; Chemistry 304 and L304. Physical Chemistry and Laboratory; Mathematics 301. Differential Equations.

Senior Year Chemistry 406. Advanced Inorganic Chemistry; Chemistry 409. Advanced Analytical Chemistry.

Either Chemistry 403. Qualitative Organic Chemistry or Chemistry 401 and L401. Advanced Physical Chemistry and Laboratory must be selected as an approved elective in the junior or senior year.

Bachelor of Arts in Chemistry The bachelor of arts curriculum in chemistry requires a minimum of 124 credits, including 31 or 32 credits in chemistry. Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.A. degree listed on pages 68 and 119, the following courses are required and the indicated sequence is recommended.

Freshman Year Chemistry 101-102. General Chemistry and Chemistry L101, L102. General Chemistry Laboratory I, II; Mathematics 107, 200. Algebra and Trigonometry, and Calculus with Analytic Geometry.

Sophomore Year Chemistry 202. Quantitative Analysis; Mathematics 201-202. Calculus with Analytic Geometry; Physics 207, 208. University Physics I, II.

Junior Year Chemistry 301-302. Organic Chemistry and Chemistry L301, L302. Organic Chemistry Laboratory I, II;

Senior Year Chemistry 303. Physical Chemistry; Chemistry 304 and L304. Physical Chemistry and Laboratory.

Bachelor of Science in Chemistry Education The bachelor of science curriculum in chemistry education requires a minimum of 124 credits, including 28 credits in chemistry. For the B.S. program in chemistry education, see page 281 under the listings of the Department of Secondary Post Secondary Education, School of Education.

ENGLISH

M. THOMAS INGE, Chairman of the Department

ELIZABETH F. DUKE, Assistant to the Chairman

C. W. GRIFFIN, Director of Freshman English

J. MAURICE DUKE, Director of Sophomore English

Robert A. Armour / Mary Lynn S. Bayliss / E. Walton Beacham
Sudie Y. Beck / Helen Berkowitz / E. Allan Brown / E. Frenchie Campbell
John A. Carstens / Walter R. Coppedge / Gertrude C. Curtler
Daryl C. Dance / Susan A. Gohlman / Roger P. Hailes / Nathaniel H. Henry
Alpheus F. Holmes / Joseph H. Jenkins / Anne S. Jordan
Ellen E. Kallienke / Lawrence F. Laban / Michael D. Linn / Earl N. Lockard
George C. Longest / Albert M. Lyles / A. Bryant Mangum
Robert C. Markham / Richard W. Mercer / Douglas K. Morris
Kenneth B. Newell / Sandra K. Panici / Cheryl L. Parker
James D. Pendleton / Edward C. Peple, Jr. / Phil R. Phelps
Richard K. Priebe / Elizabeth R. Reynolds / Gary R. Sange

Nicholas A. Sharp / Margaret G. Tinsley / Mary G. Welch
 Thomas M. Welch / J. Ellington White / J. Edwin Whitsell
 Ann M. Woodlief / Richard K. Zacharias

OBJECTIVES The purpose of the curriculum in English is to help the student acquire an understanding of his literary heritage and its relationship to contemporary life, develop an appreciation and practical knowledge of the modes of literary expression, and prepare himself for advanced work in English language and literature.

The Department of English offers two degree programs:

1. Bachelor of arts in English.
2. Bachelor of science in English education, conferred through the School of Education.

In addition the department offers required and elective courses in English composition, language, and literature for students in other programs of study as well as for those majoring in English.

Degree Requirements

Bachelor of Arts in English The bachelor of arts curriculum in English requires a minimum of 124 credits, including 42 credits in English, 30 of which must be in upper-level (300-400) courses; six credits may be taken in foreign literature in English translation offered by the Department of Foreign Languages.

Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.A. degree listed on pages 68 and 119, students in the bachelor of arts curriculum in English must choose their English major electives so that there will be a minimum of six upper-level credits from each of the four following areas: (1) English literature, (2) American literature, (3) linguistics, criticism, and advanced writing, and (4) comparative literature.

English Literature

203, 204 English Literature
 319 English Literature, 1660-1744
 320 English Literature, 1744-1798
 321 Romantic Literature
 322 Victorian Poetry
 323 Victorian Prose
 324 English Literature, 1890-1918
 401 Shakespeare
 402 Chaucer
 403 Milton
 415 English Novel, 18th Century
 416 English Novel, 19th Century
 423 English Drama, 900-1642
 424 English Drama, 1660-1800
 441 Renaissance Literature
 442 17th Century Literature

American Literature

205, 206 American Literature
 313 Southern Literature
 314 Black American Writers
 371 American Literature: Colonial and Federal
 372 American Literature: The American Renaissance
 373 American Literature: Realism and Naturalism
 374 American Literature: Early 20th Century
 375 American Literature: Contemporary
 414 American Novel
 471 Minority Voice in American Literature

Comparative Literature*

201, 202 Western World Literature
 315 The Modern Novel
 316 Modern Poetry
 317 Modern Drama
 361 Bible as Literature
 363 African Literature
 407 Medieval Epic and Romance
 421 Comparative Literature I
 422 Comparative Literature II
 FLT 301, 302 Chinese Literature
 in English Translation
 FLT 311, 312 French Literature
 in English Translation
 FLT 321, 322 German Literature
 in English Translation
 FLT 331, 332 Greek Literature
 in English Translation
 FLT 341, 342 Russian Literature
 in English Translation

FLT 351, 352 Spanish Literature
 in English Translation
 FLT 361, 362 Latin Literature
 in English Translation

**Linguistics, Criticism, and
Advanced Writing**

301 Introduction to General
 Linguistics
 303 Modern Grammar
 304 Advanced Composition
 305-306 Creative Writing: Poetry
 307, 308 Creative Writing: Story
 Writing
 350 Approaches to Literature
 426-427 Creative Writing: Play-
 writing
 431 Literary Criticism
 451 History of the English
 Language

Bachelor of Science in English Education The bachelor of science curriculum in English education requires a minimum of 124 credits including at least 36 credits in English. For the B.S. program in English education, see page 282 under the listings of the Department of Secondary/Post Secondary Education, School of Education.

FOREIGN LANGUAGES

WILLIAM J. BECK, Chairman of the Department

John C. Birmingham, Jr. / Gerhard S. Kallienke / Ronald S. Marta
 Alexander McNamara / Cecile E. Noble / Jean-Louis G. Picherit
 Anna E. Platz / H. Laurie Pross / Bradley A. Shaw / Kenneth A. Stackhouse
 Judy C. Walker

OBJECTIVES The purpose of the curriculum in French is to prepare the student for graduate study in the language, for the teaching of French on the secondary level, and for service in fields requiring the knowledge of French.

In addition to courses in French, substantial offerings in German and Spanish are available in both day and evening sessions. Courses in Chinese, Greek, Hebrew, Italian, Latin, and Russian are usually offered in the Evening College only. (See the **Evening College Catalog**.)

The Department of Foreign Languages offers two degree programs:

1. Bachelor of arts in French.

*No more than six credits in foreign literature in English translation taught by the Department of Foreign Languages may be applied toward the English major.

2. Bachelor of science in French education, conferred through the School of Education.

Freshmen admitted to the School of Arts and Sciences who wish to continue study of their high school language must take a placement test. Students transferring from other colleges and universities with advanced placement or advanced standing in foreign language will receive credits as granted by the institution from which they are transferring. Transfer students who wish to continue in their college language must take the language placement test. Transfer students who have not begun language study at the collegiate level and who wish to continue study of their high school language must take the placement test. Consult pages 120 or 122 for the specific language requirement of the bachelor of arts or bachelor of science degree.

The Department of Foreign Languages also offers the following literatures in English translation: Chinese, French, German, Greek, Russian, Latin, and Spanish. While these courses do not satisfy the normal language requirements for the B.A. or B.S. degrees, they are offered to both language majors and others interested in such classes. A complete listing will be found under the section entitled Foreign Literatures in English Translation.

Degree Requirements

Bachelor of Arts in French The bachelor of arts curriculum in French requires a minimum of 124 credits, including 30 credits in French upper-level (300-400) courses.

Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.A. degree listed on pages 68 and 119, the student majoring in French is required to take the following courses; French 301, 302. Survey of Literature; French 303, 304. Advanced Grammar and Translation; French 305. French Civilization; and 15 credits from any 400 level French courses. In fulfilling the general requirements of the School of Arts and Sciences for the bachelor of arts in French, the student must take History 101-102. History of Civilization and two years of a second foreign language.

Bachelor of Science in French Education The bachelor of science curriculum in French education requires a minimum of 124 credits, including at least 30 credits in French. For the B.S. program in French education, see page 283 under the listings of the Department of Secondary/Post Secondary Education, School of Education.

HISTORY AND GEOGRAPHY

MELVIN I. UROFSKY, Chairman of the Department

Thelma S. Biddle / Alden G. Bigelow / William E. Blake, Jr.

Alan V. Briceland / Robert D. Crome

Harold E. Greer, Jr. / Sandra M. Hawley

Daniel P. Jordan, Jr. / Susan E. Kennedy / John D. Lyle

Michael W. Messmer / Larry D. Minock / James T. Moore

George E. Munro / Francis C. Nelson / A. A. Rogers
Arnold Schuetz / Philip J. Schwarz / Ruth D. See
L. Winston Smith / Robert M. Talbert
Virginus B. Thornton

OBJECTIVES

History is the study of the development of human ideas, attitudes, and institutions. In a university oriented toward the professional training of its students, the history program serves as a unifying force in drawing together all of man's experiences.

The Department of History and Geography offers two degree programs:

1. Bachelor of arts in history.
2. Bachelor of science in history and social science education conferred through the School of Education.

In addition the department offers required and elective courses in a wide variety of specializations for other programs, for general education, and for interdisciplinary studies.

Degree Requirements

Bachelor of Arts in History The bachelor of arts curriculum in history requires a minimum of 124 credits, including 42 credits in history, 30 of which must be in upper-level (300-400) courses.

Along with completion of the general requirements of the Academic Campus and the School of Arts and Sciences for the B.A. degree listed on pages 68 and 119, the approved electives must be either:

1. Offered by the School of Arts and Sciences or the School of Education or
2. Offered by the Departments of Economics, Theatre, or Art History or
3. Specifically approved for the individual student by the Department of History and Geography Curriculum Committee.

Bachelor of Science in History Education The bachelor of science curriculum in history education requires a minimum of 124 credits including at least 24 credits in History. For the B.S. program in history education, see page 284 under listings of the Department of Secondary/Post-Secondary Education, School of Education.

MASS COMMUNICATIONS

GEORGE T. CRUTCHFIELD, Chariman of the Department

Robert S. Boyd / J. Edward Grimsley / Jack R. Hunter
Valts E. Jegermanis / James R. Looney* / Earl A. McIntyre

*On educational leave 1973-74.

E. A. Moffett / Michael W. Singletary / Hampden H. Smith
Kenneth R. Sparks / William H. Turpin / Bruce Vanden Bergh

OBJECTIVES The purpose of the four-year curriculum in mass communications is to give the student a broad background in arts and sciences as well as instruction in communication skills.

The Department of Mass Communications offers a bachelor of science degree in mass communications with concentrations in the following areas:

1. **News-editorial Sequence** This concentration is intended primarily for those who wish to prepare themselves for newspaper writing or editing positions.
2. **Public Relations Sequence** This concentration is designed to prepare students for employment in a public relations capacity in industry, government, or institutions.
3. **Magazine Sequence** This concentration is intended for students who wish to seek careers in magazine writing, editing, and management.
4. **Broadcast News Sequence** This concentration is designed for students who wish to prepare themselves for radio and television journalism.
5. **Advertising Sequence** This concentration is designed to prepare students for careers in advertising departments of manufacturers and retailers, advertising agencies, advertising media, and advertising service organizations.

The department maintains a placement service to aid students in obtaining positions after graduation.

Degree Requirements

Bachelor of Science in Mass Communications The bachelor of science curriculum in mass communications requires a minimum of 124 credits, including 30 credits in mass communications courses. Of the 30 credits, the advertising sequence requires 21 credits in upper-level (300-400) courses; the news editorial, public relations, and broadcast news sequences require 18 credits in upper-level (300-400) courses; and the magazine sequence requires 15 credits in upper-level (300-400) courses.

The following recommended curriculum guide should be consulted for specific courses designated to fulfill both the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree as listed on pages as well as the requirements for the mass communications degree.

The laboratory science requirement may be fulfilled from the following sequences: Biology 101-102. General Biology and Biology L101, L102. General Biology Laboratory I, II; Biology 101, L101. General Biology and Laboratory I and one four-credit biology elective; Chemistry 101-102. General Chemistry and Chemistry L101, L102. General Chemistry Laboratory I, II; Chemistry 103-104. Introduction to Modern Chemistry and Chemistry

L103, L104. Introduction to Modern Chemistry Laboratory I, II. Physics 107-108. Physical Sciences; Physics 201-202. General Physics; or Physics 207-208. University Physics I, II.

Skill in typing is required before a student enters sophomore year.

Curriculum in Mass Communications

Advertising Sequence

Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree listed on pages 68 and 121, the students in the advertising sequence must take Mass Communications 181, 281, 282, 381, 382, 384, 481, 482, 483, and 484. The mathematics requirement may be fulfilled by Mathematics 113-114, or Mathematics 113, Statistics 213.

News-Editorial, Public Relations, Magazine, and the Broadcast News Sequences.

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
Mass Communications 181. Principles of Advertising	—	3
English 101-102. Composition and Rhetoric	3	3
Foreign Language or Computer Science	3-4	3-4
History 103, 104. History of Modern Europe	3	3
Mass Communications 101. Mass Communications	3	—
Mathematics 113. Finite Mathematics	3	—
Mathematics 114. Finite Mathematics		
or		
Statistics 213. Introduction to Statistics	—	3
	15-16	15-16

Second Year

English Electives	3	3
History 201, 202. American History	3	3
Mass Communications 203. News Reporting	3	—
Mass Communications 210. Mass Media Graphics*	—	3
Laboratory Science	4	4
Political Science 201, 202. American Government	3	3
	16	16

*Broadcast news students should take Mass Communications 261. Principles of Broadcasting.

*Third Year***News-Editorial Sequence**

Economics 201-202. Principles of Economics	3	3
Mass Communications 301. Basic Photo-Journalism	3	—
Mass Communications 303-304. Advanced Reporting ...	3	3
Mass Communications 305. Editing and Makeup	—	3
Mass Communications 308. Communications Law	3	—
Approved or Free Electives	3	6
	<hr/> 15	<hr/> 15

Public Relations Sequence

Economics 201-202. Principles of Economics	3	3
Mass Communications 301. Basic Photo-Journalism	3	—
Mass Communications 305. Editing and Makeup	—	3
Mass Communications 308. Communications Law	3	—
Mass Communications 321. Publicity	—	3
Approved or Free Electives	6	6
	<hr/> 15	<hr/> 15

Magazine Sequence

Economics 201-202. Principles of Economics	3	3
Mass Communications 301. Basic Photo-Journalism	—	3
Mass Communications 308. Communications Law	3	—
Mass Communications 341. Feature and Article Writing .	—	3
Mass Communications 343. Magazine Editing and Materials Preparation	3	—
Approved or Free Electives	6	6
	<hr/> 15	<hr/> 15

Broadcast News Sequence

Economics 201-202. Principles of Economics	3	3
Mass Communications 308. Communications Law	3	—
Mass Communications 361. News Film	—	3
Mass Communications 363-364. Advanced Broadcast Reporting	3	3
Mass Communications 365. Radio-Television Production	3	—
Approved or Free Electives	3	6
	<hr/> 15	<hr/> 15

	Credits	
	1st Sem.	2nd Sem.
<i>Fourth Year</i>		
News-Editorial Sequence		
Humanities Electives	3	3
Mass Communications 407. Newspaper Management	3	—
Approved or Free Electives	10	13
	<hr/> 16	<hr/> 16
Public Relations Sequence		
Humanities Electives	3	3
Mass Communications 422. Public Relations	3	—
Mass Communications 425. Public Opinion	—	3
Approved or Free Electives	10	10
	<hr/> 16	<hr/> 16
Magazine Sequence		
Humanities Electives	3	3
Mass Communications 445. Business and Industrial Journalism	—	3
Approved or Free Electives	13	10
	<hr/> 16	<hr/> 16
Broadcast News Sequence		
Humanities Electives	3	3
Mass Communications 467. Broadcast Newsroom Management	—	3
Approved or Free Electives	13	10
	<hr/> 16	<hr/> 16

MATHEMATICAL SCIENCES

WILLIAM A. GLYNN, Chairman of the Department

Richard E. Allan / John F. Berglund / Robert L. Causey
 Stephen B. Cohen / Reuben W. Farley / Robert H. Johnston
 C. Michael Lohr / Paul D. Minton / J. Richard Morris
 Robert W. Murdock / Malcolm L. Murrill / Edward A. Newburg
 Pratip N. Raychowdhury / Raymond C. Sansing / David A. Schedler
 Robert J. Schwabauer / Larry S. Scott / William A. Thedford
 John Van de Walle / Raymond V. van Wolkenten / James A. Wood

OBJECTIVES The purpose of the curriculum in mathematical sciences is to promote understanding of the mathematical sciences and their structures, uses, and relationships to other disciplines. To this end it emphasizes

excellence in teaching and the professional growth of its students and faculty through study and research.

The curriculum contains a required core of lower-level courses which provides a foundation for more advanced work while furnishing an introduction to a variety of areas in the mathematical sciences, applied mathematics, statistics, and computer science. The remainder of the curriculum is very flexible, providing for broadly based study or for specialization in several areas, and permitting the student to plan, in consultation with his advisor, a program which will satisfy his particular educational goals.

The Department of Mathematical Sciences offers two degree programs:

1. Bachelor of sciences in mathematical sciences.
2. Bachelor of science in mathematics education, conferred through the School of Education.

In addition the department offers required and elective courses in mathematics, statistics, and computer science for students in other programs of study as well as for those majoring in mathematical sciences.

Master of Science in Mathematical Sciences For information about the graduate program in mathematical sciences, see the School of Arts and Sciences **Graduate Bulletin**.

Master of Education in Mathematics Education For information about the graduate program in mathematics education, see the School of Education **Graduate Bulletin**.

Degree Requirements

Bachelor of Science in Mathematical Sciences The bachelor of science curriculum in mathematical sciences requires a minimum of 124 credits, including 39 credits in computer science, mathematics, and statistics above the 100 level, 24 of which must be in upper-level (300-400 level) courses.

On the basis of the results of the mathematics placement test, a student may be required to take Mathematics 101-102. College Algebra and Trigonometry or Mathematics 107. Algebra and Trigonometry. No more than three credits in 100-level mathematics courses will be applicable to the general requirements for the B.S. degree. Credit for 100-level mathematics courses may not be applied toward the credits required for the mathematics major.

Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree listed on pages 68 and 121, the following courses are required:

Freshman Year Mathematics 200-201. Calculus with Analytic Geometry. (Mathematics 101-102 or Mathematics 107 may have to be taken prior to Mathematics 200, depending upon the results of the mathematics placement test); Computer Science 201. Introduction to Computing; Mathematics 211. Mathematical Structures.

Sophomore Year Mathematics 202. Calculus with Analytic Geometry; Statistics 212. Concepts of Statistics; Biology 101-102. General Biology and Biology L101, L102. General Biology Laboratory I, II, or Biology 101, L101 and one four-credit biology elective; or Chemistry 101-102. General Chemistry, and Chemistry L101, L102. General Chemistry Laboratory I, II.

Junior and Senior Years Physics 207-208. University Physics I, II; and one of the following tracks:

Mathematics Mathematics 310. Linear Algebra; Mathematics 401. Algebraic Structures; Mathematics 407-408. Analysis I, II; Mathematics 409. General Topology I; and nine credits of approved electives in mathematical sciences.

Applied Mathematics Mathematics 301. Differential Equations; Mathematics 310. Linear Algebra; Mathematics 411. Applied Linear Algebra; Mathematics 417-418. Methods of Applied Mathematics; and nine credits of approved electives in mathematical sciences. Students in this track will normally elect several courses in another field.

Statistics Statistics 313-314. Statistical Methods; Mathematics 309. Introduction to Probability Theory; Statistics 413-414. Mathematical Statistics; and nine credits of approved electives in mathematical sciences.

Computer Science Computer Science 202. Computers and Programming; Computer Science 301. Introduction to Discrete Structures; Computer Science 302. Numerical Calculus; Mathematics 310. Linear Algebra; Computer Science 401. Data Structures; Computer Science 403. Programming Languages; Computer Science 405. Computer Organization; and six credits of approved electives in mathematical sciences.

The student should consult with his advisor to adapt the above to his particular goals and needs.

Bachelor of Science in Mathematics Education The bachelor of science in mathematics education curriculum requires a minimum of 124 credits, including 42 credits in mathematics. For the B.S. program in mathematics education, see page 284 under the listings of the Department of Secondary/Post-Secondary Education, School of Education.

PHILOSOPHY AND RELIGIOUS STUDIES

THOMAS O. HALL, JR., Chairman of the Department

Earle J. Coleman / Keith R. Crim / Barney R. Freasier, Sr.

William H. Friedman / James E. Lindsey, Jr. / Jerome L. Lonnes

Barbara H. McGhan / Harlan P. McGhan / Robert M. Talbert

OBJECTIVES The purpose of the curriculum in philosophy and religious studies is to give the student an understanding of the contributions of

religion and philosophy to man's life and thought. Special effort is made to relate these fields of study not only to man's general cultural environment, but also to one's own values.

The student who has chosen a church-related vocation is provided the opportunity to begin his academic preparation with an objective and descriptive study of religion. Furthermore courses in religious studies in a state university enable one to study religion along with other disciplines, such as the liberal and fine arts and sciences, as a major aspect of man's culture.

The Department of Philosophy and Religious Studies offers a bachelor of arts degree in philosophy.

In addition, the department offers elective courses for other programs of study as well as courses for the student majoring in philosophy.

Degree Requirements

Bachelor of Arts in Philosophy The bachelor of arts curriculum in philosophy requires a minimum of 124 credits, including 30 credits in philosophy courses.

The student must also fulfill the general requirements of the Academic Campus and the School of Arts and Sciences for the B.A. degree listed on pages 68 and 119.

PHYSICS AND PHYSICAL SCIENCE

BILLY W. SLOOPE, Chairman of the Department

Jerry L. Alderman / J. Temple Bayliss* / Paul H. Knappenberger
Ronald B. Mosley / Eugene J. Shiles / G. Bruce Taggart

OBJECTIVES The curriculum in physics and physical science is designed for the following purposes:

- (1) To prepare students for careers in physics or allied technical areas;
- (2) To prepare students for graduate study in physics or other science-oriented and interdisciplinary areas for which physics is a necessary or desirable background;
- (3) To prepare students for the teaching of physics in secondary schools;
- (4) To prepare students for careers in areas such as business, dentistry, environment science, law, medicine, or science writing for which a basic, but not specialized, background in physics may be desired.
- (5) To prepare students for transfer to schools of engineering.

*On educational leave 1973-74.

The Department of Physics and Physical Science offers two degree programs:

1. Bachelor of science in physics.
2. Bachelor of science in physics education, conferred through the School of Education.

In addition the department offers required and elective courses for students in other programs of study as well as for students majoring in physics.

Degree Requirements

Bachelor of Science in Physics The bachelor of science curriculum in physics requires a minimum of 124 credits, including a minimum of 30 hours in physics and Mathematics 200, 201, and 202 (or equivalent). Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree listed on pages 68 and 121, the following courses are required and the indicated sequence is recommended:

Freshman Year Mathematics 200. Calculus with Analytic Geometry (Mathematics 101-102 or Mathematics 107. Algebra and Trigonometry may have to be taken prior to Mathematics 200 depending upon the results of the mathematics placement test); Biology 101-102 and Biology L101, L102. General Biology and Laboratory I, II or Biology 101, L101 and one four-credit biology elective; or Chemistry 101-102. General Chemistry and Chemistry L101, L102. General Chemistry Laboratory I, II.

Sophomore Year Physics 207, 208. University Physics I, II. Mathematics 201-202. Calculus with Analytic Geometry.

Junior Year Physics 320, 331, 337, and 340 or 362.

Senior Year Physics electives.

Students who plan to do graduate work may need to take advanced work in languages.

Bachelor of Science in Physics Education The bachelor of science curriculum in physics education requires a minimum of 124 credits, including 25 credits in physics. For the B.S. program in physics education, see page 285 under the listings of the Department of Secondary/Post-Secondary Education, School of Education.

POLITICAL SCIENCE

RAPHAEL ZARISKI, Chairman of the Department

Robert J. Austin / Frank P. Belloni / Janipher R. Greene

Dennis W. Johnson / Henri J. Warmenhoven / Nelson Wikstrom

OBJECTIVES The political science curriculum has two central objectives. First, it offers the student who prefers a broad liberal arts education a

comprehensive understanding of the nature of politics and the functioning of the political process. Second, it provides a sound foundation for the student who wishes to pursue graduate study in political science or a wide variety of careers which require a knowledge of governance and the political process.

The Department of Political Science offers a bachelor of arts degree in political science.

In addition the department offers elective courses in political science for students in other programs of study as well as for those majoring in political science.

Degree Requirements

Bachelor of Arts in Political Science The bachelor of arts curriculum in political science requires a minimum of 124 credits, including 33 credits in political science.

Along with completion of the general requirements of the Academic Campus and the School of Arts and Sciences for the B.A. degree listed on pages 68 and 119, the student majoring in political science must complete the following courses: Political Science 101. Elements of Political Science, and Political Science 201, 202. American Government.

In fulfilling the requirement of 33 credits in political science a major may, with the consent of his advisor, substitute three credits in a related course from one of the following university departments or programs: Afro-American studies, sociology and anthropology, history, mass communications, philosophy and religious studies, psychology, economics, urban studies, administration of justice and public safety, and social welfare.

PSYCHOLOGY

WILLIAM S. RAY, Chairman of the Department

Stephen M. Auerbach / Kent G. Bailey / John A. Blake / Alfred L. Brophy
 Joel R. Butler / Joseph J. Crowley / Michael W. Etkin / John T. Fauls
 William D. Groman / John J. Hartnett / Glenn R. Hawkes / James F. Hooke
 Phyllis A. Hornbuckle / Donald J. Kiesler / Thomas A. Kirk*
 Melvin V. Lubman / John M. Mahoney / James P. McCullough, Jr.
 Robert W. Nay / David G. Preston / Nancy J. Spencer / Edwin R. Thomas
 Robert M. Tipton

OBJECTIVES. The purpose of the curriculum in psychology is to give the student a scientific attitude toward and a better understanding of human behavior and to prepare students for one of several occupational goals for which a basic knowledge of psychological principles appears appropriate.

*On educational leave 1973-74.

The Department of Psychology offers a bachelor of science degree in psychology. In addition the department offers required and elective courses for those not majoring in psychology.

Each advisor in the Department of Psychology is now prepared to provide his undergraduate advisees with information regarding the choice of elective courses that will increase their opportunities as paraprofessional behavior technicians in the mental health services, or as workers in the fields of personnel, corrections, and education, or as applicants to certain post-baccalaureate professional programs.

Master of Science and Doctor of Philosophy Programs in Psychology. For information about graduate work in psychology, see the School of Arts and Sciences **Graduate Bulletin**.

Degree Requirements

Bachelor of Science in Psychology. The bachelor of science curriculum in psychology requires a minimum of 124 credits, including 30 credits in psychology.

Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree listed on pages 68 and 121, the student majoring in psychology is required to take the following courses: Psychology 201. General Psychology (prerequisite for upper-level work in psychology); Psychology 214. Applications of Statistics; either Psychology 301. Child Psychology, or Psychology 304. Developmental Psychology; Psychology 317-318. Introduction to Experimental Psychology; Psychology 411. Survey of Psychological Tests; Psychology 451. History and Systems of Psychology.

In fulfilling the general requirements of the School of Arts and Sciences for the bachelor of science degree in psychology, the student must take Biology 101-102 and Biology L101, L102. General Biology and Laboratory I, II or Biology 101, L101, and one four-credit biology elective; Sociology 101. General Sociology; and Anthropology 103. Cultural Anthropology. Two courses in mathematics must be taken: Mathematics 101. College Algebra, and Statistics 213. Introduction to Statistics. If a student scores high enough on the mathematics placement test, he may satisfy the requirement with Statistics 213 only.

Students who plan to do graduate work may need to take advanced work in languages.

INTERDISCIPLINARY DEGREE PROGRAM IN SCIENCE

BILLY W. SLOOPE, Coordinator

The faculty advising in the program is done by members of the biology, chemistry, mathematics, and physics departments.

OBJECTIVES The purpose of the bachelor of science curriculum in science is to provide the student with a broad and interdisciplinary, but fundamental, grounding in the sciences. The program is also designed

particularly to fulfill the needs of students preparing for study in medical or dental schools.

Students completing the curriculum prescribed below will earn the degree of bachelor of science in science.

Degree Requirements

Bachelor of Science in Science The bachelor of science curriculum in science requires a minimum of 124 credits. Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree listed on pages 68 and 121, the curriculum requires 30 credits in advanced science courses, Mathematics 200. Calculus with Analytic Geometry, and the lower level science courses listed below. The 30 credits in advanced science must be selected from the areas listed below and must include at least two courses from each of the three areas.

Freshman Year Biology 101-102 and Biology L101, L102 General Biology and Laboratory I, II; Chemistry 101-102 and Chemistry L101, L102 General Chemistry and Laboratory I, II; Mathematics 200. Calculus with Analytic Geometry; (in preparation for Mathematics 200, all students must take the Mathematics Placement Test. Depending on the results, the student may be placed in Mathematics 101, 102, or 107. Algebra and Trigonometry prior to enrolling in Mathematics 200.)

Sophomore Mathematics 200. Calculus with Analytic Geometry
Junior, (if it has not already been completed in freshman
and year); Physics 201-202. General Physics or Physics
Senior Years. 207, 208. University Physics I, II; 30 credits in advanced science courses, which must include at least two courses from each of three following areas.

Advanced Science Courses

Area I

Computer Science

302 Numerical Calculus

Mathematics

201 Calculus

202 Calculus

309 Introduction to Probability
Theory

310 Linear Algebra

Physics

320 Introduction to Modern Physics

331 Electric Circuits and Electronics

337 Classical Mechanics

340 Introduction to Statistical
Physics

351 Introduction to Quantum
Physics

362 Electromagnetism

Physical Science

307 Introduction to Material Science

308 Physical Metallurgy

Statistics

313-314 Statistical Methods

Area II

Chemistry

202 Quantitative Analysis

301 and L301 Organic Chemistry
and Laboratory

Chemistry (Continued)

302 and L302 Organic Chemistry
and Laboratory
303 Physical Chemistry
304 Physical Chemistry
L304 Physical Chemistry Laboratory
401 Advanced Physical Chemistry
L401 Advanced Physical Chemistry
Laboratory
403 Qualitative Organic Chemistry
404 Advanced Organic Chemistry
406 Advanced Inorganic Chemistry
409 Advanced Analytical Chemistry
410 Atomic and Molecular
Structure

Biochemistry

302 Introduction to Biochemistry

Area III**Biology**

201 Vertebrate Morphology
202 Vertebrate Embryology
204 Invertebrate Zoology
207 Survey of the Plant Kingdom
208 Botany of Seed Plant
303 Bacteriology
304 Mycology
308 Vertebrate Histology
309 Entomology
310 Genetics
311 General Physiology
318 Cell Biology
400 Ecology
412 Radiation Biology
413 Parasitology
422 Evolution and Speciation

SOCIOLOGY AND ANTHROPOLOGY

JOHN H. McGRATH III, Chairman of the Department

Norman W. Blaikie / Ralph L. Blankenship / Jerrold L. Buerer
James A. Cramer / Rutledge M. Dennis / Lewis Diana / Brian D. Hayden
Charles Jarmon / Edward E. Knipe / Leonard Kovit / Melvin Mednick
Michael J. Miller* / Barbara A. Munjas
Bernard Murphy / Cecilia C. Nelson / Lynn D. Nelson / Leonard G. Pasierb
Allan M. Schwartzbaum / B. Kirshna Singh / Charles W. Thomas*
Colin M. Turnbull / J. Sherwood Williams

OBJECTIVES The curriculum in sociology and anthropology reflects the departmental awareness that undergraduate majors have varying backgrounds, interests, and professional or vocational aspirations. The curriculum seeks to insure that each student develops a sufficiently sound foundation in basic principles, theory, and techniques of analysis in sociology and/or anthropology. The result will be that the widest possible spectrum of opportunity will remain open to the student, even in the event that his goals change as he moves through the program. Finally the curriculum seeks to allow each student the maximum possible responsibility for the program that he pursues.

Toward the attainment of these goals a diverse set of offerings in sociology and anthropology, including opportunities for independent study and research for advanced students and potential student involvement in faculty research, has been provided.

The Department of Sociology and Anthropology offers a bachelor of science degree in sociology and anthropology.

*On educational leave 1973-74.

Secondary School Teaching Certificate Students interested in teaching sociology in secondary schools should consult the School of Education section of this Bulletin for specific information concerning:

1. **General Certification Requirements for Teachers:** In addition to those requirements listed, a course in basic economics is required for sociology certification.
2. **Criteria used by the Department of Secondary/Post-Secondary Education** for admitting students into the professional program. See page 270 in the secondary/post-secondary education section.
3. **Courses in education and the sequence requirements** for the professional year as set forth in the B.S. program in history and social science education under the Department of Secondary/Post-Secondary Education. See page 284.

Master of Science in Sociology and Anthropology For information about graduate work in sociology, see the School of Arts and Sciences, **Graduate Bulletin**.

Undergraduate Topics Courses Topics courses in both sociology and anthropology (Sociology 495 and Anthropology 495) are an integral part of the program and provide an unusual opportunity for the advanced student. Generally, these courses are restricted to a small number of students who share specialized interests in a topic which is either too advanced or too limited in its general appeal to warrant its inclusion as a regular offering. At least one such seminar is offered each semester and the topics course may be repeated to a maximum of 18 credits so long as there is no replication of the topics.

Independent Study These courses (Sociology 497 and Anthropology 497) are designed for juniors and seniors capable of doing independent work on selected topics under the direction of specific faculty members. For example, if a course is not being regularly offered in some area of interest to a particular student, and if there are not enough students interested in the area to warrant the offering of a topics course, the student may, with the permission of the instructor, enroll in independent study.

Students may earn a maximum of 24 credits in departmental independent study courses, but they may not enroll for more than 6 credits per semester. Only majors in sociology and anthropology or related fields may enroll in these courses. All students must have completed a minimum of 12 credits in sociology or anthropology with an overall sociology-anthropology grade point average of at least 2.7.

Degree Requirements

Bachelor of Science in Sociology and Anthropology The bachelor of science curriculum in sociology and anthropology requires a minimum of 124 credits, including 30 credits in sociology and anthropology, 21 of which must be in upper-level (300-400) courses.

Along with the general requirements of the Academic Campus and the School of Arts and Sciences for the B.S. degree listed on pages 68 and 121,

the student majoring in sociology and anthropology must complete the following courses: Sociology 101. General Sociology; Anthropology 103. Cultural Anthropology; Sociology 214. Applications of Statistics; Sociology 320. Methods of Sociological Research, and Sociology 402. Sociological Theory. Students may concentrate in either sociology or anthropology beyond these requirements.

Psychology 214. Applications of Statistics or Statistics 214. Introduction to Statistics may be substituted for Sociology 214. However, neither of these two courses will count toward the 30 credits in sociology and anthropology required for the sociology and anthropology degree.

In fulfilling the general requirements of the School of Arts and Sciences for the B.S. degree listed on page , the student must choose two courses in mathematics from one of the following options: (1) Mathematics 101. College Algebra and Statistics 213. Introduction to Statistics; (2) Mathematics 113. Survey of Finite Mathematics and Statistics 213. Introduction to Statistics; or (3) if a student scores high enough on the mathematics placement test he may satisfy the requirement with Statistics 213 only.

The laboratory science requirement may be fulfilled from the following courses: Biology 101-102. General Biology and Biology L101, L102. General Biology Laboratory I, II; Biology 101, L101 General Biology and Laboratory I and one four-credit biology elective; Chemistry 101-102. General Chemistry and Chemistry L101, L102. General Chemistry Laboratory I, II; Chemistry 103-104 and Chemistry L103, 104. Introduction to Modern Chemistry and Laboratory I, II; Physics 107-108. Physical Sciences; Physics 201-202. General Physics; or Physics 207-208. University Physics I, II.

In addition majors are strongly urged, but not specifically required, to take at least 18 credits in related fields such as psychology, mathematics, philosophy, political science, or economics as approved or free electives. Students who plan to do graduate work may need to take advanced work in languages.

PREPARATION FOR PROFESSIONAL STUDIES IN THE HEALTH SCIENCES

ARTHUR J. SEIDENBERG, Coordinator of Pre-Health Sciences Counseling

Preparation for the Study of Medicine and Dentistry

Robert G. Bass, Chairman, Pre-medical Advisory Committee; Joseph P. Chinnici, Lewis C. Goldstein, T. Daniel Kimbrough, Jr., Walter L. Richards, Arthur J. Seidenberg, Billy W. Sloope, Billy L. Stump, Lawrence J. Winters, Pre-medical Advisors; Dale E. Arrington, Raphael M. Ottenbrite, Pre-dental Advisors.

General Information In preparation for entering these professions, leaders in medical and dental education encourage prospective students to obtain a broad background in liberal education including not only sciences but also humanities and social sciences. Though one is not restricted to a

science curriculum for entry to medical or dental school, pursuit of course work in a science area provides a sound background for further study in medicine or dentistry. **A prospective student should check with his intended school of medicine or dentistry for its specific requirements.**

Many schools of medicine, including the School of Medicine on the MCV Campus, require a minimum of three years (90 semester hours or the equivalent) in an accredited college or university, but preference is given to candidates who will earn a baccalaureate degree prior to the beginning of medical school. The following are the courses generally required for admission to most medical schools including the School of Medicine at VCU: biological science, general chemistry, organic chemistry, English, and physics. Other courses, such as general physiology, genetics, mathematics through calculus, and behavioral sciences, though not required, are strongly recommended for the pre-medical student.

Many schools of dentistry, including the School of Dentistry on the MCV Campus, require a minimum of at least two years of liberal arts education taken in an accredited college or university. It is recommended that the pre-dental program include courses in biology, organic chemistry, physics, English, and the behavioral sciences. Applicants with three or four years of undergraduate study are considered to be better prepared than those with minimal preparation.

Programs of Study Admission to and completion of a pre-medical or pre-dental program of studies offered by the School of Arts and Sciences does not constitute admission to the School of Medicine or School of Dentistry of Virginia Commonwealth University; the student must make separate application to the medical or dental school of his choice at the appropriate time.

Most students entering the School of Arts and Sciences with an interest in preparing for medical or dental school will apply as a "pre-medical" or "pre-dental" student. This classification as pre-medical or pre-dental exists to identify the student's future career interests; the student does not earn a "pre-medical" or "pre-dental" degree. As the student begins to clarify his academic interests through regular conversations with his assigned pre-medical or pre-dental advisor, the student will "change his major" to one of the regular four-year degree programs offered in the School of Arts and Sciences, while, at the same time, completing the necessary prerequisites for application for admission to the medical or dental school of his choice.

The bachelor of science in biology, the bachelor of science or bachelor of arts in chemistry (with the proper selection of electives), and the bachelor of science in science programs offered at the Academic Campus of VCU provide excellent opportunities to complete the necessary prerequisites for application to a medical or dental school.

In addition these curricula allow a student to plan a program for entry into medical or dental schools which accept students upon completion of three years of successful undergraduate work. The university will award a bachelor of science degree to a student who has successfully completed

the first year of an accredited medical or dentistry school provided he has completed all the general requirements for the School of Arts and Sciences and the requirements in his major. Successful completion of the first year of medical or dental school will be accepted as thirty credits of electives towards the student's total hours.

Preparation for the Study of Veterinary Medicine

Dale E. Arrington, Advisor

The bachelor of science in chemistry and the bachelor of science in science (with the proper selection of electives) programs offered at the Academic Campus provide excellent opportunities to complete the necessary pre-requisites for application to a veterinary school.

Preparation for the Study of Dental Hygiene

Charles R. Blem, Advisor

The curriculum in pre-dental hygiene offered by the School of Arts and Sciences meets the minimum academic requirements for application to many professional programs, including the bachelor of science degree program in dental hygiene offered through the School of Dentistry on the MCV Campus. Students intending to apply to the junior and senior year professional program at another institution should consult their catalogue for the exact prerequisite courses.

Admission to and satisfactory completion of the following two-year preparatory program offered by the School of Arts and Sciences does not constitute admission to the junior and senior year professional program on the MCV Campus. The student must make separate application to that professional program at MCV through the Director of Admissions, Medical College of Virginia, Box 163, MCV Station, Richmond, Virginia 23298, in the fall of the year preceding the year of desired admission. Admission to the program at MCV will be based on scholastic record, demonstrated aptitude and interest, and a personal interview by the departmental admissions committee.

<i>First Year</i>	<i>Credits</i>	
	<i>1st Sem.</i>	<i>2nd Sem.</i>
Biology 101-102. General Biology	3	3
Biology L101, L102. General Biology Laboratory I, II . . .	1	1
English 101-102. Composition and Rhetoric	3	3
Mathematics 101-102 or Mathematics 107. College		
Algebra and Trigonometry	3	3(0)
Sociology 101. General Sociology	—	3
Approved Electives	5-6	2(5)
	<hr/> 15-16	<hr/> 15

Second Year

Chemistry 101-102. General Chemistry	3	3
Chemistry L101, L102. General Chemistry Laboratory I, II ..	1	1
Psychology 201. General Psychology	3	—
Speech 121. Effective Speech	3	—
English Electives	3	3
Approved Electives	2-3	8-9
	<hr/>	<hr/>
	15-16	15-16

Preparation for the Study of Medical Technology

George C. Grant, Donald D. Shillady, Advisors

The curriculum in pre-medical technology offered by the School of Arts and Sciences meets the minimum academic requirements for application to many professional programs, including the bachelor of science degree program in medical technology offered through the School of Allied Health Professions on the MCV Campus. Students intending to apply to the junior and senior year professional program at another institution should consult their catalogue for the exact prerequisite courses.

Admission to and satisfactory completion of the following two-year preparatory program offered by the School of Arts and Sciences does not constitute admission to the junior and senior year professional program on the MCV Campus. The student must make separate application to that professional program at MCV through the Director of Admissions, Medical College of Virginia, Box 163, MCV Station, Richmond, Virginia 23298, in the fall of the year preceding the year of desired admission. Admission to the program at MCV will be based on scholastic record, demonstrated aptitude and interest, and a personal interview by the departmental admissions committee.

	<i>Credits</i>	
	<i>1st Sem.</i>	<i>2nd Sem.</i>
<i>First Year</i>		
Chemistry 101-102. General Chemistry	3	3
Chemistry L101, L102. General Chemistry Laboratory I, II ..	1	1
English 101-102. Composition and Rhetoric	3	3
Mathematics 101-102. College Algebra and Trigonometry		
or		
Mathematics 107-200. College Algebra and Trigonometry		
and Calculus with Analytic Geometry	3	3-4
Humanities or Social Science Electives	3	3
Biology 101. General Biology	3	—
Biology L101. General Biology Laboratory I	1	—
Biology 102 and L102. General Biology and General Biology		
Laboratory II Biology 206. Human Physiology		
or		
Biology 205. Basic Human Anatomy	—	4

Second Year

Chemistry 301. Organic Chemistry	3	—
Chemistry L301. Organic Chemistry Laboratory I	1	—
Chemistry 202. Quantitative Analysis	—	4
Biology 102 and L102. General Biology and General Biology Laboratory II		
or		
Biology 206. Human Physiology		
or		
Biology 205. Basic Human Anatomy	—	4
Biology 303. Bacteriology	4	—
Humanities or Social Science Electives	6	6
	14	14

Preparation for the Study of Nursing

MARGARET L. MAY, Coordinator of Advising

The curriculum in pre-nursing offered by the School of Arts and Sciences meets the minimum academic requirements for application to many professional programs, including the bachelor of science degree program in nursing offered through the School of Nursing on the MCV Campus. Students intending to apply to the junior and senior year professional program at another institution should consult their catalogue for the exact pre-requisite courses.

Admission to and satisfactory completion of the following two-year preparatory program offered by the School of Arts and Sciences does not constitute admission to the junior and senior year professional program on the MCV Campus. The student must make separate application to that professional program at MCV through the Director of Admissions, Medical College of Virginia, Box 163, MCV Station, Richmond, Virginia 23298, in the fall of the year preceding the year of desired admission. Admission to the program at MCV will be based on scholastic record, demonstrated aptitude, and interest.

	<i>Credits</i>
English 101-102. Composition and Rhetoric	6
History Electives	6
Psychology 201. General Psychology	3
Biology 101-102. General Biology	6
Biology L101, L102. General Biology Laboratory I, II ..	2
Sociology 101. General Sociology	3
Social Sciences Electives	6
Chemistry 103-104. Introduction to Modern Chemistry .	6
Chemistry L103, L104. Introduction to Modern Chemistry Laboratory I, II	2
Mathematics 113. Survey of Finite Mathematics	3
Humanities Electives	12
Approved Electives	5-6

Preparation for the Study of Occupational Therapy

ARTHUR J. SEIDENBERG, Coordinator of Advising, Alan V. Briceland, Alexander McNamara, Harlan P. McGhan, Eugene J. Shiles, Kenneth A. Stackhouse, G. Bruce Taggart, William A. Thedford, James A. Wood, Advisors.

The curriculum in pre-occupational therapy offered by the School of Arts and Sciences meets the minimum academic requirements for application to many professional programs, including the bachelor of science degree program in occupational therapy offered through the School of Allied Health Professions on the MCV Campus. Students intending to apply to the junior and senior year professional program at another institution should consult their catalogue for the exact prerequisite courses.

Admission to and satisfactory completion of the following two-year preparatory program offered by the School of Arts and Sciences does not constitute admission to the junior and senior year professional program on the MCV Campus. The student must make separate application to that professional program at MCV through the Director of Admissions, Medical College of Virginia, Box 163, MCV Station, Richmond, Virginia 23298, in the fall of the year preceding the year of desired admission. Admission to the program at MCV will be based on scholastic record, demonstrated aptitude and interest, and a personal interview by the departmental admissions committee.

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
English 101-102. Composition and Rhetoric	3	3
Mathematics 101. College Algebra	3	—
Statistics 213. Introduction to Statistics	—	3
Psychology 201. General Psychology	3	—
Sociology 101. General Sociology	—	3
Biology 101. General Biology	3	—
Biology L101. General Biology Laboratory I	1	—
Biology 205. Basic Human Anatomy	—	—
or		
Biology 206. Human Physiology	—	4
Elective	3	3
	<hr/> 16	<hr/> 16
<i>Second Year</i>		
Psychology 304. Developmental Psychology	3	—
Psychology 409. Psychology of Personality	3	—
Psychology Elective	—	3
Biology 205. Basic Human Anatomy		
or		
Biology 206. Human Physiology	4	—
Sociology elective	3	—
Electives	2-3	12
	<hr/> 15-16	<hr/> 15

These are considered minimum requirements. Students are encouraged to pursue additional study in biology, psychology, and sociology.

Preparation for the Study of Pharmacy

Juniad A. Siddiqui, Stuart J. Silvers, Lawrence J. Winters, Advisors.

The curriculum in pre-pharmacy offered by the School of Arts and Sciences meets the minimum academic requirements for application to many professional programs, including the bachelor of science degree program in pharmacy offered through the School of Pharmacy on the MCV Campus. Students intending to apply to the professional program at another institution should consult their catalogue for the exact prerequisite courses.

Admission to and satisfactory completion of the following two-year preparatory program offered by the School of Arts and Sciences does not constitute admission to the final three years of the professional program on the MCV Campus. The student must make separate application to that professional program at MCV through the Director of Admissions, Medical College of Virginia, Box 163, MCV Station, Richmond, Virginia 23298, in the fall of the year preceding the year of desired admission. Admission to the program at MCV will be based on scholastic record, demonstrated aptitude and interest, and a personal interview by the departmental admissions committee.

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
Biology 101-102. General Biology	3	3
Biology L101, L102. General Biology Laboratory I, II	1	1
English 101-102. Composition and Rhetoric	3	3
Mathematics 101-102. College Algebra and Trigonometry	3	3
Approved Humanities and Social Sciences Electives	6	6
	<hr/> 16	<hr/> 16
<i>Second Year</i>		
Chemistry 101-102. General Chemistry	3	3
Chemistry L101, L102. General Chemistry Laboratory I, II	1	1
Economics 201-202. Principles of Economics	3	3
Physics 201-202. General Physics	4	4
Approved Humanities and Social Sciences Electives	3	3
Approved Elective	3	—
	<hr/> 17	<hr/> 14

The program as outlined below includes 39 hours in required subject areas and 24 hours of electives, of which a minimum of 18 hours must be selected from areas in the humanities and social sciences.

Preparation for the Study of Physical Therapy

Jackson E. Jeffrey, Coordinator; Alpheus F. Holmes, Michael D. Linn, Advisors.

The curriculum in pre-physical therapy offered by the School of Arts and Sciences meets the minimum academic requirements for application to many professional programs, including the bachelor of science degree program in physical therapy offered through the School of Allied Health Professions on the MCV Campus. Students intending to apply to the junior and senior year professional program at another institution should consult their catalogue for the exact prerequisite courses.

Admission to and satisfactory completion of the following two-year preparatory program offered by the School of Arts and Sciences does not constitute admission to the junior and senior year professional program on the MCV Campus. The student must make separate application to that professional program at MCV through the Director of Admissions, Medical College of Virginia, Box 163, MCV Station, Richmond, Virginia 23298, in the fall of the year preceding the year of desired admission. Admission to the program at MCV will be based on scholastic record, demonstrated aptitude and interest, and a personal interview by the departmental admissions committee.

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
Biology 101-102. General Biology	3	3
Biology L101, L102. General Biology Laboratory I, II	1	1
English 101-102. Composition and Rhetoric	3	3
Chemistry 103-104. Introduction to Modern Chemistry ..	3	3
Chemistry L103, L104. Introduction to Modern Chemistry Laboratory I, II	1	1
Mathematics 101-102. College Algebra and Trigonometry	3	3
Approved Electives	3	3
	<hr/> 17	<hr/> 17
<i>Second Year</i>		
Physics 201-202. General Physics	4	4
Psychology 201. General Psychology	3	—
Psychology Elective	—	3
Social Science Electives	3	3
Approved Electives	6-7	6-7
	<hr/> 16-17	<hr/> 16-17

Recommended approved electives are: foreign language (Latin, French, or German), mathematics (analytical geometry, calculus), social sciences, biological sciences, and physical education courses such as gymnastics, tumbling, and modern dance.

It is suggested that the social science courses be selected from the following areas: adolescent psychology, anthropology, child psychology, economics, history, personality development, philosophy, psychology of adjustment, sociology, and statistics.

Preparation for the Study of Radiologic Technology

Charles R. Blem, Advisor

The curriculum in pre-radiologic technology offered by the School of Arts and Sciences meets the minimum academic requirements for application to many professional programs, including the associate of science degree program in radiologic technology offered through the School of Allied Health Professions on the MCV Campus. Students intending to apply to the final years of the professional program at another institution should consult their catalogue for the exact prerequisite courses.

Admission to and satisfactory completion of the following one-year preparatory program offered by the School of Arts and Sciences does not constitute admission to the final two years of the professional program on the MCV Campus. The student must make separate application to that professional program at MCV through the Director of Admissions, Medical College of Virginia, Box 163, MCV Station, Richmond, Virginia 23298, in the fall of the year preceding the year of desired admission. Admission to the program at MCV will be based on scholastic record, demonstrated aptitude and interest, and a personal interview by the departmental admissions committee.

<i>First Year (Academic Campus)</i>	<i>Credits</i>	
	<i>1st Sem.</i>	<i>2nd Sem.</i>
Biology 103-104. Anatomy and Philosophy	3	3
English 101-102. Composition and Rhetoric	3	3
Mathematics 113. Survey of Finite Mathematics	3	—
Physics R 103. Introductory Physics for Radiology	—	3
Psychology 201. General Psychology	3	—
Electives	3	6
	<hr/> 15	<hr/> 15

Preparation for Professional Studies in Law

Dennis W. Johnson, Department of Political Science, Walter S. Griggs, Jr., Department of Business Administration and Management, Advisors.

Few law schools list specific undergraduate courses as prerequisites for admissions. Thus the student who is considering law school may major in virtually any department in the School of Arts and Sciences, the School of Business or the School of Community Services. Students, however, are encouraged to obtain a broad liberal arts background with emphasis on the social sciences and English.

The pre-law advisors maintain continual contact with law school admissions offices and will assist any interested student with questions concerning curriculum, financial assistance, application procedure or the law school admissions test.

INTERDISCIPLINARY COURSES

THOMAS O. HALL, JR., Coordinator, Humanities

JOHN H. MCGRATH, Coordinator, Social Science

The following courses are the first of several interdisciplinary courses to be developed in the near future. These courses will be taught by a number of faculty members drawn from several departments, with the aim of assisting the student to gain a broader understanding of ideas and the interrelationships among several fields of study. Registration in these courses is open to all students at VCU with sophomore standing.

Humanities 295 The Great Ideas of Civilized Man Semester course; 3 lecture hours. 3 credits. Maximum total 6 credits. Prerequisite: sophomore standing. Course may be repeated once under different topic. • An interdisciplinary course structured around archetypal themes, an exploration in depth of ideas which have occupied the thoughts of mankind. Material covered will include selected readings from literature, philosophy, and religion.

Humanities 302 In Search of the American Dream Semester course; 3 credits. A course by newspaper. • Distinguished scholars from a variety of disciplines examine the persistence of the utopian themes and the spirit which animated this nation's beginnings.

Social Science 295 Issues in Social Sciences Semester course; variable credits, 1-3 credits per semester, maximum total 6 credits. • An interdisciplinary course structured around social issues pertinent to today's society. See schedule of classes for particular issue to be covered and the semester credit for which each issue will be offered.

Social Science 340 Human Sexuality Semester course; 3 lecture hours. 3 credits. • A study of the variety of the forms, sources, and consequences of human sexual behaviors and the attitudes, beliefs, and values associated with them. The data and its analysis are directed to the significance of sex in human experience.

AFRO-AMERICAN STUDIES

RUTLEDGE M. DENNIS, Coordinator

The following courses in the area of Afro-American Studies are open to all students, subject to curricular requirements for their degree programs. Courses in Afro-American Studies are designed to help students gain knowledge and appreciation of the history and culture of African people and their contributions to world civilizations.

COURSES IN AFRO-AMERICAN STUDIES

Afro-American Studies 103, 104 Introduction to Afro-American Studies Semester courses; 3 lecture hours. 3, 3 credits. • A broad overview of the historical, social, economic, psychological, and cultural aspects of Afro-American life.

Afro-American Studies 105 Sociology of Racism Semester course; 3 lecture hours. 3 credits. • The course will explore the direct and indirect ways in which racial attitudes are acquired, their effect on individuals and society, and the institutional and ideological manifestations of racism as a "faith system," as exploitation, and as a form of human conflict. The central focus of interest will be on black-white relationships. (Same as Sociology 105.)

Afro-American Studies 200 Africanism Semester course; 3 lecture hours. 3 credits. • An exploration of the unique and diverse cultural heritage shared by Africans. Particular attention will be given to life-styles and work-styles as these relate to knowledge, behavior, ideas, and objects.

Afro-American Studies 204 Africa in Transition Semester course; 3 lecture hours. 3 credits. Prerequisite: Afro-American Studies 200 or permission of the instructor. • The impact of modern social change upon the traditional aspects of African life. Various aspects of social change as it applies to the African today will be explored.

Afro-American Studies 245, 246 Introduction to Afro-American Music Semester courses; 3 lecture hours. 3, 3 credits. • An introductory survey of black involvement with the development of music in America from 1607 to the present. Afro-American musical styles will be studied from many aspects including their African roots and contemporary popular expression. (Same as Music History 245-246.)

Afro-American Studies 302 Black Political Thought Semester course; 3 lecture hours. 3 credits. • A historical and sociological perspective on the political and social ideas of black thinkers from David Walker to the present. (Same as Political Science 302.)

Afro-American Studies 303 Black Theatre Semester course; 3 lecture hours. 3 credits. • A study of the major developments in the evolution of black theatre through readings and studio performances in black related and black theatre dramaturgy. (Same as Theatre 303.)

Afro-American Studies 305 Sociology of the Black Family Semester course; 3 lecture hours. 3 credits. Prerequisites: Sociology 101 or permission of the instructor. • A socio-history of the development of the dynamics of the black family. (Same as Sociology 305.)

Afro-American Studies 310 Economics and Poverty Semester course; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • A study of the economic problems of low-income groups and agency and foundation programs designed to encounter these problems. (Same as Economics 310.)

Afro-American Studies 311 Urbanization and Blacks: A Cross-Cultural Comparison Semester course; 3 lecture hours. 3 credits. • Comparison and evaluation of past and contemporary urbanization patterns of black people primarily in Africa and America, their current social, economic and political problems, and the range of solutions being proposed for dealing with them. (Same as Urban Studies 311).

Afro-American Studies 314 Black American Writers Semester course; 3 lecture hours. 3 credits. • An examination of the contributions of black writers in America from colonial times to the present. (Same as English 314).

Afro-American Studies 317 Money and Banking in the Black Financial Community Semester course; 3 lecture hours. 3 credits. • Money and banking blended with the problems of black finance. This course is acceptable as a substitute for Economics 307. (Same as Economics 317.)

Afro-American Studies 322 Personality and Behavior of the Afro-American Semester course; 3 lecture hours. 3 credits. Prerequisite: Psychology 201. • A study of personality factors, such as motivation, ego functioning, and the socialization processes with special emphasis on living conditions of Afro-Americans. (Same as Psychology 322.)

Afro-American Studies 333 Geography of Africa Semester course; 3 lecture hours. 3 credits. • A study of land forms, climate, peoples, boundaries, trade, and cultural groupings of the African continent. (Same as Geography 333.)

Afro-American Studies 363 African Literature Semester course; 3 lecture hours. 3 credits. • The study of African oral performances and written literatures in English with emphasis on West and South Africa. (Same as English 363.)

Afro-American Studies 410 Americans from Africa: A History Semester course; 3 lecture hours. 3 credits. • A survey of the history and contributions of Negro Americans from the African background to the present time. This course has also been designed to be offered through a series of television lectures with seminars held on campus and at other points. (Same as History 410.)

Afro-American Studies 411, 412 History of Africa Semester courses; 3 lecture hours. 3, 3 credits. • First semester: a history of Africa from prehistoric times through World War II. Second semester: from 1945 to the present, stressing the emergence of the African nations. (Same as History 411, 412.)

Afro-American Studies 413 African and Oceanic Art. Semester course; 3 lecture hours. 3 credits. • A study of the architecture, painting, sculpture, and civilizations of the major art-producing tribes of West Africa and Oceania from the thirteenth century to the present. (Same as Art History 412.)

Afro-American Studies 497 Independent Study Semester course; variable credit, maximum 4 credits per semester; maximum total in all independent study courses 4 credits. Open generally only to students of junior and senior standing who have acquired at least 12 credits in Afro-American Studies courses. Determination of the amount of credit and permission of the instructor and coordinator must be procured prior to registration for the course.

COURSES IN ANTHROPOLOGY

Anthropology 103 Cultural Anthropology Semester course; 3 lecture hours. 3 credits. • A general survey of the field of anthropology; the development of man and his culture. Liberal use is made of area studies.

Anthropology 201 The Evolution of Man and Culture Semester course; 3 lecture hours. 3 credits. Recommended for majors and designed for especially interested students. • An introduction to physical anthropology and archaeology, this course deals with the development of man and his culture. Human evolution will be considered in the light of the fossil record, primate studies, and genetics. The development of man's culture from the earliest evidences to the rise of civilization. The course emphasizes adaptation as a critical element in the understanding of man's development.

Anthropology 251 Introductory Archeology Semester course; 3 lecture hours. 3 credits. Prerequisite: Anthropology 103. • History, development and current trends in research methods and theories in archeology illustrated with studies of representative areas of the world.

Anthropology 301 Introduction to General Linguistics Semester course; 3 lecture hours. 3 credits. • An introduction to methods of language analysis, emphasizing phonology, morphology, syntax, and dialectology. (Same as English 301.)

Anthropology 305 Social Anthropology Semester course; 3 lecture hours. 3 credits. Prerequisite: a previous or concurrent course in social science. • Examination of the institutions of simple and peasant societies with an emphasis on the cross-cultural understanding of marriage, family, political, and economic groupings and activities. Selected case studies.

Anthropology 350, 351 Peoples and Cultures of the World Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: Anthropology 103. • A survey of the culture and traditions of a particular geographic area. Subject matter includes culture history, language distribution, varieties of social and political institutions, religion, subsistence pursuits, and effects of change. See schedule of classes for area being offered in a particular semester.

Anthropology 360, 361 Archaeology of the World Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: Anthropology 103, 201 or 251. • The prehistory of specific regional areas of the world (depending on semester and professor). The areas covered include the Old World (Europe and Asia), Mesoamerica, Australia, or other regions. The course will explore the development of culture within the specified area through use of an anthropological framework and archaeological methods and materials. See schedule of classes for area covered in a specific semester.

Anthropology 369 Urban Anthropology Semester course; 4 lecture hours. 4 credits. Prerequisite: Sociology 101 or Anthropology 103. • The application of traditional anthropological techniques to urban settings starting with the early studies of small rural communities to the ethnographic accounts of subcultures within modern metropolitan regions. Special em-

phasis upon field methods and the application of these to actual field experiences of students.

Anthropology 375 Field Archaeology Semester course; 3 lecture hours, 8 field and laboratory hours. 6 credits. Prerequisites: Anthropology 201 or Anthropology 251. • Techniques of field methods, artifacts, and recording. Excavations in the field and analysis in the laboratory.

Anthropology 405 Tribal and Peasant Economics Semester course; 3 lecture hours. 3 credits. • Economic institutions and practices in simple and peasant societies and their relationship to other kinds of social behavior and institutions. Topics covered include: the character of non-monetary economics, organization and production, forms of money-less exchange, markets, wealth and its uses, and the effects of economic development.

Anthropology 425 Religion in Folk Societies Semester course; 3 lecture hours. 3 credits. • A survey of anthropological research and theories of religion in folk societies, with special emphasis on ritual and function.

Anthropology 454 Anthropological Theory Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101 or Anthropology 103. • Major theoretical perspectives in social and cultural anthropology.

Anthropology 495 Topics in Anthropology Semester course; 3 lecture hours. 3 credits, maximum 6 credits per semester, maximum total of 18 credits in departmental topics courses which may be applied to the major. Prerequisite: permission of instructor. • Seminar on current specialized areas of anthropological interest. See schedule of classes for specific topic to be offered each semester.

Anthropology 497 Independent Study Semester course, variable credit, maximum 6 credits per semester; maximum total for all independent study courses 12 credits. Open generally only to students of junior or senior standing who have acquired at least 12 credits in the departmental discipline. Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course. Cannot be used in place of existing courses.

COURSES IN BIOLOGY

NOTE: The following courses do not apply toward the major in biology: Biology 103-104, 106, 108, 205, 206, 332, 402, 465.

Biology 101-102 General Biology Continuous course; 3 lecture hours. 3-3 credits. • First semester: a consideration of the principles common to living systems. Second semester; a topical approach, with choice of emphasis on particular aspects of the world of life.

Biology L101 General Biology Laboratory I. Semester course; 2 hours. 1 credit. • Experimental work correlated with Biology 101. Can be taken only concurrently with or subsequent to Biology 101.

Biology L102 General Biology Laboratory II. Semester course; 2 hours. 1 credit. • A survey of plant and animal life.

Biology 103-104 Anatomy and Physiology Year course; 2 lecture and 2 laboratory hours. 6 credits. • A study of the normal structure and function of the human body. (Open only to students in hospital-affiliated, medical secretarial, and radiologic technology programs.)

Biology 106 Nutrition Second semester; 3 lecture hours. 3 credits. • The fundamental principles of normal nutrition and their application in promoting growth and maintaining health; modification of these diets to meet the needs of persons with common pathological conditions. (Open only to students in hospital-affiliated programs.)

Biology 108 Microbiology Both semesters: 2 lecture and 2 laboratory hours. 3 credits. • A study of the microscopic agents of disease, including methods of disinfection, factors of infecting and immunity, and an introduction to the important infectious diseases. Laboratory emphasis is on methods of study and proper techniques. (Open only to students in hospital-affiliated programs.)

Biology 200 Biological Terminology Semester course; 1 lecture hour. 1 credit. Prerequisite: a course in biology. • The study of Greek and Latin word roots, prefixes, and suffixes in the vocabulary of biology through readings and drill with the aid of a dictionary.

Biology 201 Vertebrate Morphology Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101. • The evolution of vertebrate forms as demonstrated by anatomical studies of selected vertebrate types.

Biology 202 Vertebrate Embryology Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101. • A comparative study of vertebrate development.

Biology 204 Invertebrate Zoology Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101. • A survey of the invertebrate animals, examining morphologies, life cycles, evolutionary relationships, and the importance of these organisms to man. Selected representative species will be studied in detail in the laboratory.

Biology 205 Basic Human Anatomy Semester course; 2 lecture and 4 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101. • A study of human body structure with emphasis on the skeleto-muscular aspect, utilizing the cat for dissection and human specimens and models as demonstrations.

Biology 206 Human Physiology Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101. • A study of the functioning of the human body with emphasis on the experimental procedures.

Biology 207 Survey of the Plant Kingdom Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101. • A study of representative plants and their life cycles.

Biology 208 Botany of the Seed Plant Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101. • A study of the physiology, structure, and development of the seed plant.

Biology 303 Bacteriology Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: 8 credits of biology or permission of the instructor. • A study of the morphology and physiology of bacteria, yeasts, and molds as applied to their cultivation, identification, economic and hygienic significance.

Biology 304 Mycology Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: Biology 303 or permission of instructor. • The morphology, identification, and laboratory culture of fungi.

Biology 308 Vertebrate Histology Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101 and permission of the instructor. • The microscopic structure of vertebrate tissues and organs and the techniques used in the preparation of materials for histological study.

Biology 309 Entomology Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: Biology 101 and L101. • A course designed to give the student an appreciation of insect life. Field and laboratory work is emphasized to illustrate insect diversification, diagnostic features, habitats, and development patterns. A project is required, and some independent work will be necessary.

Biology 310 Genetics Semester course; 3 lecture hours. 3 credits. Prerequisite: 8 credits of biology. • The basic principles of genetics and eugenics with emphasis on their applications.

Biology 311 General Physiology Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisites: 8 credits of biology and Chemistry 101-102. • Physiological principles illustrated by cells, tissues, organs, and organisms from the viewpoint of chemical and physical phenomena.

Biology 313 Vertebrate Natural History Semester course; 2 lecture and 3 laboratory hours. 3 credits. Prerequisite: 8 credits of biology. • The natural history of vertebrates with emphasis upon species native to Virginia.

Biology 315 Man and Environment 3 lecture hours. 3 credits. Open to non-majors. Prerequisite: junior or senior status. • Not applicable to the biology major. A comparative study of the ecology and natural history of human populations, including the environments as determining factors in the evolution of human institutions and technology, resources management, and population crises, cultural traditions as mechanisms of population control, basic theory of population biology.

Biology 318 Cell Biology Semester course; 3 lecture hours, 3 credits. Prerequisite: 8 hours each of biology and chemistry. • An introductory examination of the cellular and molecular aspects of biological processes in plants and animals.

Biology 332 Environmental Pollution Semester course; 3 lecture hours. 3 laboratory hours. 3 credits. Prerequisite: 8 credits of biology. • The pollution in our environment with emphasis on the procedures for detection and abatement.

Biology 400 Ecology Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: 12 credits of biology. • A study of the interaction of the organism and the biological and physical environments.

Biology 401 Industrial Microbiology Semester course; 3 lecture hours. 3 credits. Prerequisite: Biology 303 or equivalent. • General survey of microorganisms of industrial importance with special reference to the paper, food, textile, paint, petroleum, tobacco, chemical, and pharmaceutical industries.

Biology 402 Functional Anatomy of the Extremities Semester course; 1 lecture hour and 6 laboratory hours. 3 credits. Prerequisite: Biology 465. • A detailed study of the anatomy of the extremities, with particular emphasis on functional aspects, by dissection of the human cadaver.

Biology 403 Biology of Fishes Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: Biology 201 or permission of instructor. • Evolution, taxonomy, structure, behavior, and ecology of fishes. Laboratory work will include special field trips for the collection of specimens.

Biology 405 Bacterial Physiology Semester course; 3 lecture hours. 3 laboratory hours. 4 credits. Prerequisite: Biology 303 or permission of instructor. • The physiology of bacterial metabolism and growth. Industrial and economically important bacteria will be stressed.

Biology 409 Plant Anatomy Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: Biology 208. • Preparation and study of cells, tissues, and organs of seed plants.

Biology 410 Plant Taxonomy Semester course; 1 lecture and 5 laboratory hours. 3 credits. Prerequisite: Biology 101 and L101 or permission of the instructor. • Systematic survey of the vascular plant families with emphasis on relationships. Some field trips for observing local flora.

Biology 411 Summer Flora Semester course; 1 lecture and 5 laboratory hours. 3 credits. Prerequisite: Biology 101 and L101 or permission of instructor. • Field course in taxonomy of local summer flora.

Biology 412 Radiation Biology Semester course; 3 lecture hours. 3 credits. Prerequisite: 16 credits in science, including eight credits in biology and/or the permission of instructor. • A presentation by a series of lectures and demonstrations of the fundamentals of radioactivity, including the properties of radiation and the application of radioisotopes and tracer methodology to the biological sciences and nuclear medicine. Included are the biological effects of ionizing radiation on living systems and the theoretical and practical aspects of radiation protection.

Biology 413 Parasitology Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: 14 credits in biology or permission of in-

structor. • A survey of the life cycles, classification, host-parasite relationships, and general biology of animal parasites.

Biology 414 Aquatic Ecology Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisite: 12 credits in biology or permission of instructor. • An ecological approach to the physical, chemical, and biological study of fresh water environments with particular consideration given to the methods and principles of evaluating water quality.

Biology 416 Ornithology Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: 8 credits of biology or permission of instructor. • Basic biology of birds, with emphasis on their role in the environment.

Biology 417 Mammalogy Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisites: 12 credits of biology and permission of instructor. • Study of the characteristics, adaptive radiation, and distribution of mammals, with emphasis on North American forms.

Biology 418 Plant Ecology Semester course; 3 lecture and 2 laboratory hours. Two three-day field trips required. 4 credits. Prerequisite: Biology 400 or consent of instructor. • A lecture, field, and laboratory course concerned with the development, succession, and dynamics of plant communities and their interrelations with climate, soil, biotic, and historic factors.

Biology 420 Plant Physiology Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisites: Biology 207 or 208 and Chemistry 301-302. • Cell structure and function, water relations, inorganic plant nutrition, metabolism, and plant growth regulators.

Biology 422 Evolution and Speciation Semester course; 3 lecture hours. 3 credits. Prerequisite: Biology 310 or equivalent. • Study of evolutionary principles, with emphasis on genetic and environmental factors leading to changes in large and small populations of plants and animals, and the mechanisms responsible for speciation.

Biology 429 Neuroanatomy Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: Biology 465 or permission of instructor. • A study of the morphology and functional aspects of the central and peripheral nervous system of the human body.

Biology 435 Herpetology Semester course; 2 lecture hours. 2 credits. Prerequisite: Biology 201 or permission of instructor. • A study of the phylogeny, natural history, and adaptation of the amphibians and reptiles.

Biology L436 Laboratory in Herpetology Semester course; 1 credit. Prerequisite: Biology 201 or equivalent and permission of instructor. • Exercises on the anatomy, classification, and behavior of amphibians and reptiles. Two weekend field trips required.

Biology 440 Quaternary Paleoecology Semester course; 3 lecture hours. 3 credits. Pre- or corequisite: an upper level course in ecology. • A survey of Quaternary climates, environments, and biotas. Ecological processes are studied within a temporal framework of the last two million years. Emphasis

is placed on methods available for investigating and reconstructing Quaternary environments.

Biology 462 Comparative Morphology of Vascular Plants Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: 6 credits of botany or permission of instructor. • A study of the relationships between the various taxa of the Tracheophytes, based upon examination and comparison of organ development.

Biology 465 Functional Human Anatomy Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: Biology 205 or equivalent. • A study of the anatomy and kinesiology of the human body using projected specimens and the dissected cadaver. Particular emphasis is placed upon the study of the extremities. Not applicable to the major in biology, intended primarily for students in the Department of Occupational Therapy.

Biology 495 Topics in Biology Semester course; variable credit, maximum 3 credits per semester, maximum total credit for all topics courses 6 credits. • An in-depth study of a selected topic in biology. See schedule of classes for specific topic(s) and prerequisites.

Biology 497 Independent Study Semester course; variable credit, maximum 4 credits per semester; maximum total credit for all independent study courses 6 credits. Open generally only to students of junior and senior standing who have acquired at least 12 credits in the departmental discipline. Minimum GPA in biology courses of 2.50. Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course. • Independent literature search, laboratory, or field research under the direction of a staff member, resulting in the presentation of a written report to the department chairman.

COURSES IN CHEMISTRY

Chemistry 101-102 General Chemistry Continuous course; 3 lecture and 1 recitation hour. 3-3 credits. Prerequisite or co-requisite: Mathematics 101-102 or 107. • Fundamental principles and theories of chemistry, including qualitative analysis.

Chemistry L101 General Chemistry Laboratory 1 Semester course. 3 lab hours. 1 credit. • Experimental work correlated with Chemistry 101. Prerequisite or corequisite: Chemistry 101.

Chemistry L102 General Chemistry Laboratory II Semester course. 3 lab hours. 1 credit. • Experimental work includes qualitative analysis. Prerequisite or corequisite: Chemistry 102. Prerequisite: Chemistry L101.

Chemistry 103-104 Introduction to Modern Chemistry Continuous course; 3 lecture hours. 3-3 credits. • Fundamental principles and theories to provide an understanding of the scope and aims of modern chemistry with some emphasis on descriptive inorganic chemistry, organic chemistry, biochemistry, and geochemistry. (Unacceptable as a prerequisite for advanced chemistry courses.)

Chemistry L103 Introduction to Modern Chemistry Laboratory I Semester course; 3 hours; 1 credit. Experimental work correlated with Chemistry 103. Prerequisite or corequisite: Chemistry 103.

Chemistry L104 Introduction to Modern Chemistry Laboratory II Semester course; 3 hours; 1 credit. Experimental work correlated with Chemistry 104. Prerequisite or corequisite: Chemistry 104. Prerequisite: Chemistry L103.

Chemistry 105 Survey of Chemistry Semester course; 3 lecture and 2 laboratory hours. 4 credits. An elementary survey of inorganic and organic chemistry with emphasis on medical applications. (This course will not satisfy laboratory science requirements for any degree program.)

NOTE: Chemistry 101, 102, L101 and L102 are prerequisites to all of the following chemistry courses.

Chemistry 202 Quantitative Analysis Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisites: Chemistry 101-102 and L101, L102 or equivalent and Mathematics 101-102 or equivalent. • Beginning theory and practice of gravimetric, volumetric, and instrumental analysis techniques, treatment of multiple equilibria in aqueous solutions.

Chemistry 301-302 Organic Chemistry Continuous course. 3 lecture hours; 3-3 credits. • A comprehensive survey of the aliphatic and aromatic series of compounds.

Chemistry L301 Organic Chemistry Laboratory I Semester course. 4 hours. 1 credit. • Experimental work correlated with Chemistry 301. Prerequisite or corequisite: Chemistry 301.

Chemistry L302 Organic Chemistry Laboratory II Semester course. 4 hours. 1 credit. • Experimental work correlated with Chemistry 302. Prerequisite: Chemistry L301. Prerequisite or corequisite: Chemistry 302.

Chemistry 303 Physical Chemistry Semester course; 3 lecture hours. 3 credits. Prerequisites: Physics 201-202 or Physics 207-208 and Mathematics 200-201. • Ideal and non-ideal gases, thermodynamics, free energy and chemical equilibrium.

Chemistry 304 Physical Chemistry Semester course; 3 lecture hours. 3 credits. Prerequisite: Chemistry 303. • Quantum chemistry, molecular spectroscopy and structure, and chemical kinetics.

Chemistry L304 Physical Chemistry Laboratory Semester course; 6 laboratory hours per week. 2 credits. Prerequisite: Chemistry 202. Corequisite: Chemistry 304.

Chemistry 305 Introduction to Physical Chemistry Semester course; 3 lecture and 3 laboratory hours. 4 credits. • Concepts and principles of physical chemistry as related to the fields of biology, medicine, and veterinary science. (Not for chemistry majors.)

Chemistry 401 Advanced Physical Chemistry Semester course; 3 lecture hours. 3 credits. Prerequisite: Chemistry 303, 304 or permission of in-

structor. • Solution thermodynamics, heterogeneous equilibria, electrochemistry, and introductory biophysical chemistry.

Chemistry L401 Advanced Physical Chemistry Laboratory Semester course; 3 laboratory hours per week. 1 credit. Prerequisite: Chemistry L304 or permission of instructor. Corequisite: Chemistry 401.

Chemistry 403 Qualitative Organic Chemistry Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisites: Chemistry 301-302 and L301, L302. • Theory, problems, and laboratory practice of systematic qualitative analysis for organic compounds with emphasis on modern spectrometric and chromatographic methods.

Chemistry 404 Advanced Organic Chemistry Semester course; 3 lecture hours. 3 credits. Prerequisite: Chemistry 301-302 L301, L302, and Chemistry 303, 304 or permission of instructor. • An extensive treatment of certain topics of organic chemistry with emphasis on mechanism of reactions, structure, and stereochemistry.

Chemistry 406 Advanced Inorganic Chemistry Semester course; 3 lecture hours. 3 credits. Prerequisite: Chemistry 303, 304. • Advanced treatment of atomic structure, chemical bonding, properties of the elements, metal complexes, acid-base theory, and related subjects.

Chemistry 409 Advanced Analytical Chemistry Semester course; 2 lecture and 6 laboratory hours. 4 credits. Prerequisites: Chemistry 202 and 303, 304. • Theory and practice of modern spectrophotometric, electroanalytical, and chromatographic techniques. Atomic absorption, selective ion electrodes, and uses of operational amplifiers.

Chemistry 410 Atomic and Molecular Structure Semester course; 3 lecture hours. 3 credits. Prerequisite: Chemistry 303, 304. • Survey of the pertinent aspects of quantum mechanics. Line spectra, atomic structure, and molecular bonding.

Chemistry 497 Independent Study Semester course; variable credit, maximum 4 credits per semester; maximum total for all independent study courses 8 credits. Open generally to students of junior or senior standing who have acquired at least 12 credits in the departmental discipline. Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course. • Investigation of chemical problems through literature search and experimentation.

COURSES IN CHINESE

Chinese 101-102 Elementary Chinese Continuous course; 3 lecture hours, 2 laboratory hours. 4-4 credits. • Elementary grammar, reading, and oral drill.

Chinese 201-202 Intermediate Chinese Continuous course; 3 lecture hours; 3-3 credits. • Rapid review of the essentials of grammar; conversation; readings from Chinese literature.

COURSES IN COMPUTER SCIENCE

Computer Science 201 Introduction to Computing Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: three years of high school mathematics and satisfactory score on the mathematics placement test. • Basic programming and program structure. Organization and characteristics of computers. Survey of computers, languages, systems, and applications.

Computer Science 202 Computers and Programming Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: Computer Science 201. • Computer structure, machine language, instructional execution, addressing techniques, and digital representation of data. Several computer projects to illustrate basic machine structure and programming techniques.

Computer Science 301 Introduction to Discrete Structures Semester course; 3 lecture hours. 3 credits. Prerequisite: Computer Science 201. • Review of set algebra, mappings, relations, algebraic structures, directed and undirected graphs. Boolean algebra and propositional logic with applications to various areas of computer science.

Computer Science 302 Numerical Calculus Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisites: Mathematics 201, 310, and Computer Science 201. • An introduction to the numerical algorithms fundamental to scientific computer work. The algorithmic approach and the efficient use of the computer are emphasized.

Computer Science 401 Data Structures Semester course; 3 lecture hours. 3 credits. Prerequisites: Computer Science 202 and 301. • Basic concepts of data. List structures, strings, and arrays. Representation of trees and graphs. Storage systems and methods of storage allocation and collection. Multilinked structures. Symbol tables, search techniques, and sorting techniques. Formal specification of data structures.

Computer Science 403 Programming Languages Semester course; 3 lecture hours. 3 credits. Prerequisites: Computer Science 202 and Computer Science 301. • Formal definition of programming languages including specifications of syntax and semantics. Precedence, infix, prefix, and postfix notation. Global properties of algorithmic languages. Sub-routines, co-routines, and tasks. List processing, string manipulation, data description, and simulation languages. Run-time representation of program and data structures.

Computer Science 404 Compiler Construction Semester course; 3 lecture hours. 3 credits. Prerequisites: Computer Science 401 and 403. • Review of program language structures, translation, loading execution, and storage allocation. Compilation of simple expressions and statements. Organization of a compiler. Use of compiler writing languages and bootstrapping.

Computer Science 405 Computer Organization Semester course; 3 lecture and 2 laboratory hours. 4 credits. Prerequisite: Computer Science 202 and 301. • Basic digital circuits. Boolean algebra and combinational

logic, data representation and transfer, and digital arithmetic. Digital storage and accessing, control functions, input-output facilities, system organization, and reliability. Description and simulation techniques. Features needed for multiprogramming, multiprocessing and realtime systems. Other advanced topics and alternate organizations.

See also Mathematics 415-416 Numerical Analysis.

COURSES IN ENGLISH

English 001 Review of English Fundamentals Semester course; 3 lecture hours. No credits. (Offered only in the Evening College.) • An intensive review of the fundamentals of English grammar, usage, punctuation, mechanics, and spelling; paragraph and theme development; regular exercises and compositions. (Especially recommended for those whose previous preparation in English has been inadequate or for those who wish to improve their writing and speaking. May be taken simultaneously with English 101.)

English 101-102 Composition and Rhetoric Continuous course; 3 lecture hours. 3-3 credits. • First semester: fundamentals of effective writing and critical analysis. Second semester; more complex writing and analysis—principles of sound critical thinking, the uses of research and responsible use of evidence. Credit for 101 may be granted through achievement of an appropriate score on the English Placement Test.

NOTE: English 101-102 is prerequisite to all the following English courses.

English 201, 202 Western World Literature Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: English 101-102. • A general study of Western world literature, including English and American literature. First semester: Homer to Shakespeare. Second semester: Milton to Faulkner.

English 203, 204 English Literature Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: English 101-102. • A survey of the literature of England with collateral readings, discussions, and reports. First semester: *Beowulf* to Johnson. Second semester: Wordsworth to Auden.

English 205, 206 American Literature Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: English 101-102. • A survey of the literature of the United States. First semester: before 1855. Second semester: since 1855.

English 295 Topics in Language or Literature Semester course; 3 lecture hours. 3 credits. Maximum six credits in all topics courses at the 200 level. • An in-depth study of a selected topic or genre in language or literature, or study of any non-western literatures. See Schedule of Classes for specific topic to be offered each semester.

English 301 Introduction to General Linguistics Semester course; 3 lecture hours. 3 credits. • An introduction to methods of language analysis, emphasizing phonology, morphology, syntax, and dialectology. (Same as Anthropology 301.)

English 303 Modern Grammar Semester course; 3 lecture hours. 3 credits. • Brief review of grammatical terminology; emphasis on transformational grammar; some attention to structural grammar.

English 304 Advanced Composition Semester course; 3 lecture hours. 3 credits. • Review of rhetoric and the forms of discourse with emphasis on exposition. May not be used to satisfy the arts and sciences requirement in English.

English 305-306 Creative Writing: Poetry Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: permission of instructor. • Study of the craft of poetry writing, with instruction in a variety of techniques and guidance toward constructive self-criticism. May not be used to satisfy the School of Arts and Sciences requirement in English.

English 307, 308 Creative Writing: Stories Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: permission of instructor. • Study of the craft of short story writing with original stories submitted weekly. Students may enter the class either semester, but those taking a second semester will concentrate on revising their first semester work. May not be used to satisfy the School of Arts and Sciences requirement in English.

English 313 Southern Literature Semester course; 3 lecture hours. 3 credits. • An intensive survey of the literature of the South with special attention to the works of Poe, Kennedy, Page, Cabell, Glasgow, Caldwell, Welty, McCullers, and Faulkner.

English 314 Black American Writers Semester course; 3 lecture hours. 3 credits. • An examination of the contributions of black writers in America from colonial times to the present. (Same as Afro-American Studies 314.)

English 315 The Modern Novel Semester course; 3 lecture hours. 3 credits. • An examination of the novel, chiefly British and European, in the 20th century.

English 316 Modern Poetry Semester course; 3 lecture hours. 3 credits. • A study of British and American poetry in the twentieth century.

English 317 Modern Drama Semester course; 3 lecture hours. 3 credits. • A study of the development of the drama since Ibsen, particularly in England and America.

English 319 English Literature, 1660-1744 Semester course; 3 lecture hours. 3 credits. • The age of Dryden and Pope; English nondramatic literature of the Restoration and early eighteenth century with special attention to Dryden, Defoe, Addison, Steele, Swift, Pope, and Gay.

English 320 English Literature, 1744-1798 Semester course; 3 lecture hours. 3 credits. • The age of Johnson, Boswell, and Goldsmith; an intensive survey of the literature of the second half of the eighteenth century in England.

English 321 Romantic Literature Semester course; 3 lecture hours. 3 credits. • An intensive survey of the literature of Romanticism in England

from 1798 to 1837, with special attention to Wordsworth, Coleridge, Byron, Shelley, and Keats.

English 322 Victorian Poetry Semester course; 3 lecture hours. 3 credits.

• An intensive survey of the poetry of Victorian England, with special attention to Tennyson, Browning, Arnold, Rossetti, Swinburne, Morris, Hopkins, and Yeats.

English 323 Victorian Prose Semester course; 3 lecture hours. 3 credits.

• An intensive survey of the non-fiction prose of Victorian England, with special attention to Carlyle, Ruskin, Arnold, Newman, Mill, and Pater.

English 324 English Literature, 1890-1918 Semester course; 3 lecture hours. 3 credits.

• British literature of the 1890's (the Decadents, the Aesthetes, *Fin de siècle*, the Celtic Renaissance), the Edwardians, and the war poets.

English 350 Approaches to Literature Semester course; 3 lecture hours. 3 credits.

• The study and application of various critical approaches—historical, sociocultural, psychological, archetypal, and formalist—used in analyzing literary works.

English 361 The Bible As Literature Semester course; 3 lecture hours. 3 credits.

• Literary aspects of the Bible will be considered. Also attention will be given to the history of the English Bible. (Same as Religious Studies 361.)

English 363 African Literature Semester course; 3 lecture hours. 3 credits.

• The study of African oral performances and written literatures in English with emphasis on the literature of West and South Africa. (Same as Afro-American Studies 363.)

English 371 American Literature, Colonial and Federal Semester course; 3 lecture hours. 3 credits.

• A study of the most important writings from the founding of the first colonies to the establishment of the federal government, with some concentration on Taylor, Edwards, and Franklin.

English 372 American Literature, the American Renaissance Semester course; 3 lecture hours. 3 credits.

• A study of the most important writings of the Romantics in the 19th century, with some concentration on Poe, Emerson, Thoreau, Hawthorne, Melville, and Whitman.

English 373 American Literature, Realism and Naturalism Semester course; 3 lecture hours. 3 credits.

• A study of the most important writings from the end of the Civil War to the coming of World War I, with some concentration on Clemens, Howells, James, and Stephen Crane.

English 374 American Literature, Early Twentieth Century Semester course; 3 lecture hours. 3 credits.

• A study of the most important writings between World War I and World War II, with some concentration on Frost, Eliot, Steinbeck, Hemingway, and Faulkner.

English 375 American Literature, Contemporary Semester course; 3 lecture hours. 3 credits.

• A study of the most important writings since World

War II, with some attention to such authors as Baldwin, Bellow, Ellison, Lowell, Mailer, Malamud, Updike, and Wilbur.

English 381 Fiction Into Film Semester course; 2 lecture hours and 1 laboratory hour. 2 or 3 credits, 10 or 15 weeks, decided in advance. • A study of the translation of literature into film. Topical approaches vary from semester to semester. Consideration is given to the literature in its original form and to the methods of translating it into film. \$10 laboratory fee.

English 395 Topics in Literature Semester course; 3 lecture hours. 3 credits. Maximum 12 credits in all topics courses at the upper-division level. Prerequisite: junior standing. • An in-depth study of a literary genre, an aesthetic or cultural theme in literature, or a major writer in English or American literature. See schedule of classes for specific topic to be offered each semester.

English 401 Shakespeare Semester course; 3 lecture hours. 3 credits. • A study of representative comedies, histories, and tragedies.

English 402 Chaucer Semester course; 3 lecture hours. 3 credits. • A study of *The Canterbury Tales* and *Troilus and Criseyde*, with some attention to the lesser works.

English 403 Milton Semester course; 3 lecture hours. 3 credits. • A study of *Paradise Lost*, *Paradise Regained*, and *Samson Agonistes*, with some attention to the minor poems and selected prose.

English 407 Medieval Epic and Romance Semester course; 3 lecture hours. 3 credits. • A study of the vernacular epic and the romance in England and on the continent prior to 1500.

English 414 The American Novel Semester course; 3 lecture hours. 3 credits. • A study of the American novel from 1789 to the present, with particular emphasis on Cooper, Hawthorne, Melville, Twain, Howells, James, Dreiser, Fitzgerald, Hemingway, and Faulkner.

English 415 English Novel, Eighteenth Century Semester course; 3 lecture hours. 3 credits. • A study of the English novel from its beginnings through Jane Austen.

English 416 English Novel, Nineteenth Century Semester course; 3 lecture hours. 3 credits. • A study of the English novel from Scott through Hardy.

English 421, 422 Comparative Literature Semester courses; 3 lecture hours. 3, 3 credits. • A comparative study of the forms and contents of the literature of Western civilization in translation with some attention to the dominant influence on and interrelationships between English and continental literatures. First semester; ancient, medieval, and renaissance. Second semester; neo-classical, romantic, and modern.

English 423 English Drama, 900-1642 Semester course; 3 lecture hours. 3 credits. • A study of the origin of the English drama and its development until the closing of the theaters in 1642, exclusive of Shakespeare.

English 424 English Drama, 1660-1800 Semester course; 3 lecture hours. 3 credits. • A study of the English drama of the Restoration and eighteenth century from Dryden and Congreve to Sheridan and Goldsmith.

English 426-427 Playwriting Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: English 317 or permission of instructor. • A practical introduction to the creation of original scripts for theatre, television, and/or motion pictures. Works may be selected for reading and performance. May not be used to satisfy the arts and sciences requirement in English. (Same as Theatre 426-427.)

English 428 Children's Literature See Education 428.

English 431 Literary Criticism Semester course; 3 lecture hours. 3 credits. • A study of the fundamental concepts involved in the practice of criticism. Some attention is given to the historical development of criticism, but the primary focus is on its methods and aims.

English 441 Renaissance Literature Semester course; 3 lecture hours. 3 credits. • A survey of the non-dramatic literature of the sixteenth century in England from Skelton to Spenser.

English 442 Seventeenth Century Literature Semester course; 3 lecture hours. 3 credits. • A study of non-dramatic poetry and prose in England from 1600 to 1660.

English 446 Literature for Adolescents See Education 433.

English 451 History of the English Language Semester course; 3 lecture hours. 3 credits. • The historical development of the English language; etymology, morphology, orthography, and semantics.

English 471 Minority Voice in American Literature Semester course; 3 lecture hours. 3 credits. • Survey of American ethnic writing with special attention to the contributions of authors of North American Indian, African, Hispanic, Oriental, and Jewish descent.

English 495 Topics in Literature Semester course; 3 lecture hours. 3 credits. Maximum 12 credits in all topics courses at the upper-division level. • An in-depth study of a selected literary topic or genre or of one or two major writings in English or American literature. See schedule of classes for specific topic to be offered each semester.

COURSES IN FOREIGN LITERATURE IN ENGLISH TRANSLATION

Chinese 301, 302 Chinese Literature in English Translation Semester course; 3 lecture hours. 3, 3 credits. • First semester: a historical development of Chinese literary tradition from the *Book of Songs*. Selected works both of prose and poetry in English translation. Second semester: a historical development of Chinese literary tradition to the vernacular literature of the modern world. Selected works both of prose and poetry in English translation. (This course will not satisfy foreign language requirements. No knowledge of Chinese required).

French 311, 312 French Literature in English Translation Semester course; 3 lecture hours. 3, 3 credits. • First semester; a study of the literature of France from its origin through the eighteenth century. Second semester: a study of the literature of France of the nineteenth and twentieth centuries. (This course will not satisfy foreign language requirements. No knowledge of French required.)

German 321, 322 German Literature in English Translation Semester course; 3 lecture hours. 3, 3 credits. • First semester: a study of the literature of Germany from the origin through the eighteenth century. Second semester: a survey of German literature of the late nineteenth and twentieth centuries. (This course will not satisfy foreign language requirements. No knowledge of German required.)

Greek 331, 332 Greek Literature in English Translation Semester course; 3 lecture hours, 3, 3 credits. • First semester: an examination of the principal works of the inventors of tragedy. Second semester: an examination of the principal comedies. (This course will not satisfy language requirements. No knowledge of Greek required.)

Russian 341, 342 Russian Literature in English Translation Semester course; 3 lecture hours. 3, 3 credits. • First semester: a survey of literature from the eleventh century to the middle of the nineteenth century, with emphasis on Pushkin, Lermontov, Gogol, and Turgenev. Second semester: a survey of literature from the middle of the nineteenth century to the present. (This course will not satisfy foreign language requirements. No knowledge of Russian required.)

Spanish 351, 352 Spanish Literature in English Translation Semester course; 3 lecture hours. 3, 3 credits. • First semester: a survey of the classic works of older Spanish literature, such as *The Cid*, *Don Quixote*, *The Three-Cornered Hat*, and *Don Juan*. Second semester: a study of the major works of the nineteenth and twentieth centuries. (This course will not satisfy language requirements. No knowledge of Spanish required.)

Latin 361, 362 Latin Literature in English Translation Semester course; 3 lecture hours. 3, 3 credits. • First Semester: a survey of Latin poetry with emphasis on the epic, erotic, lyric and elegiac genres. Second semester: a survey of Latin prose with emphasis on the historians and philosophers of the Golden and Silver Ages. (This course will not satisfy language requirements. No knowledge of Latin required.)

COURSES IN FRENCH

French 101-102 Elementary French Continuous course; 3 lecture hours, 2 laboratory hours. 4-4 credits. • Elementary grammar, reading, and oral drill.

French 151-152 French for Business Majors Continuous course; 3 lecture hours. 3-3 credits. • A study of business French. (Completion of this course does not qualify a student to take intermediate language without passing the language placement test.)

French 201-202 Intermediate French Continuous course; 3 lecture hours and 1 laboratory hour. 3-3 credits. • Rapid review of the essentials of grammar; conversation, readings in French literature.

French 301, 302 Survey of Literature Semester course; 3 lecture hours. 3, 3 credits. Conducted in French. Prerequisite: French 201-202 or the equivalent. • First semester: through the eighteenth century. Second semester: nineteenth and twentieth centuries.

French 303, 304 Advanced Grammar and Translation Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: French 201-202 or the equivalent. • A systematic review of French grammar with emphasis on the elements of style and vocabulary building; translation of English stylists.

French 305 French Conversation and Civilization Semester course; 3 lecture hours. 3 credits. Prerequisite: French 201-202 or the equivalent. • Practice in the spoken language with emphasis on discussions dealing with French civilization and culture. Taught in French.

French 306 Introduction to the History of the French Language Semester course; 3 lecture hours. 3 credits. Prerequisite: permission of instructor. • A history of the phonology and grammar of French from the origins to the present with analysis and study of appropriate documents to illustrate these developments. The phonetic alphabet, dictation and pronunciation will also be stressed.

NOTE: French 301, 302 or 303, 304 are prerequisite to all the following courses.

French 411 The Middle Ages Semester course; 3 lecture hours. 3 credits. • Reading and discussion of the following: *La Chanson de Roland*, Chretien de Troyes, *Erec et Enide*; *Aucassin et Nicolette*; Villon.

French 412 The Sixteenth Century Semester course; 3 lecture hours. 3 credits. • A study of the Rhetoriqueurs; Rabelais; the Court of Francis I; the Pléiade; selections from Montaigne's *Essais*; the Baroque poets.

French 413, 414 The Seventeenth Century Semester course; 3 lecture hours. 3, 3 credits. • First semester: Readings from the Baroque and Classical prose and poetry of the principal authors of the seventeenth century; Pascal, La Fontaine, Boileau, La Rochefoucauld, La Bruyère. Second semester: dramatic literature, emphasizing the works of Corneille, Molière, and Racine.

French 416 The Eighteenth Century Semester course; 3 lecture hours. 3 credits. • Principal movements in the various genres; the "philosophies"; the growth of liberalism as reflected in the literature of Montesquieu, Voltaire, Diderot, and Rousseau. Readings from Marivaux, Prévost, and Vauvenargues.

French 417 The Nineteenth Century Semester course; 3 lecture hours. 3 credits. • Pre-Romanticism: Mme de Staël, Rousseau, and Chateaubriand. The Romantic Movement; Lamartine, Hugo, Vigny, Musset, Balzac, and Stendhal. The age of Positivism and Realism: Flaubert; Naturalism, and Symbolism.

French 495 The Twentieth Century Semester course; 3 lecture hours. 3 credits. • Readings and discussion of the novel from Proust to the "nouveau roman", of the drama from Surrealism to Antitheatre, and of poetry from Symbolism to contemporary poets.

French 495 Topics in French Semester course; 3 lecture hours. 3 credits. May be repeated for a maximum total of 6 credits. • An in-depth study of selected topics in French. See schedule of classes for specific topic to be offered each semester.

COURSES IN GEOGRAPHY

Geography 131, 132, 133, 134, 135, 136 The Geography of_____. Mini-course; 1 lecture hour, 1 credit. • A series of courses, each to meet 16 hours and to cover a particular nation or restricted world region. Each course will emphasize the area's present-day level of development and the problems affecting the area's stability and growth.

Geography 101, 102 Principles of Geography Semester course; 3 lecture hours. 3, 3 credits. • First semester: climate, weather, landforms, soils, and vegetation. Second semester: population, distribution of groups, and how groups of people live and make a living.

Geography 307 Geography of Europe First semester; 3 lecture hours. 3 credits. • A survey of the European continent, including the climate, surface features, natural resources, population, agriculture, industry, and the trade of each European nation and that nation's position in the world today.

Geography 322 World Political Geography Semester course; 3 lecture hours. 3 credits. • A study of geographic factors in world power and international affairs. First semester: topics such as resources, national unity, boundaries, etc., are discussed. Second semester: specific areas of international tension will be considered.

Geography 333 Geography of Africa Semester course; 3 lecture hours. 3 credits. • A study of the land forms, climate, peoples, boundaries, trade, and cultural groupings of the African continent. (Same as Afro-American Studies 333).

Geography 345 Geography of Latin America 3 lecture hours. 3 credits. • A study of natural conditions, resources, peoples, and cultures of South America, Mexico, Central America, and the Caribbean.

COURSES IN GERMAN

German 101-102 Elementary German Continuous course; 3 lecture hours, 2 laboratory hours. 4-4 credits. • Elementary grammar, reading, and oral drill. (Students having the permission of the chairman of their major department may substitute German 106 for German 102.)

German 106 Specialized Readings in German Semester course; 3 lecture hours; 3 credits. Prerequisite: German 101 or the equivalent. • Read-

ings will be selected from the student's major field. (Completion of this course does not qualify a student to take German 201 without passing the language placement test.)

German 151-152 German for Business Majors Continuous course; 3 lecture hours. 3-3 credits. • A study of business German. (Completion of this course does not qualify a student to take regular intermediate language without passing the language placement test.)

German 201-202 Intermediate German Continuous course; 3 lecture hours and 1 laboratory hour. 3-3 credits. • Rapid review of the essentials of grammar; conversation, readings in German literature.

German 301, 302 Survey of Literature Semester courses; 3 lecture hours. 3, 3 credits. Conducted in German. Prerequisite: German 201-202 or the equivalent. • First semester: German Romanticism through the literature of the first half of the nineteenth century. Second semester: Contemporary German literature.

German 303, 304 Advanced Grammar and Translation Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: German 201-202 or the equivalent. • A systematic review of German grammar with emphasis on the elements of style and vocabulary building. Second semester: translation of English stylists.

NOTE: German 301, 302 or 303, 304 are prerequisites to all of the following courses.

German 351 Literature of the Late Eighteenth Century Semester course; 3 lecture hours. 3 credits. Conducted in German. • The major writers and genres during the period of preclassicism and *Sturm und Drang*.

German 352 German Classicism Semester course; 3 lecture hours. 3 credits. Conducted in German. • A course centering around the works of Goethe and Schiller. Other major writers of the period will be studied to lend breadth and understanding.

German 353 Literature of the Early Nineteenth Century Semester course; 3 lecture hours. 3 credits. Conducted in German. • A course covering the period of romanticism, *Biedermeier* and *junges Deutschland*.

German 354 Literature of the Nineteenth Century Semester course; 3 lecture hours. 3 credits. Conducted in German. • A course covering the periods of realism and naturalism.

German 355 Literature of the Early Twentieth Century Semester course; 3 lecture hours. 3 credits. Conducted in German. • A course dealing with the major authors of the periods of impressionism, expressionism, and *neue Sachlichkeit* during the first half of the twentieth century.

German 356 Modern Literature Semester course; 3 lecture hours. 3 credits. Conducted in German. • A course dealing with the literature of the post-war period leading up to the present.

COURSES IN GREEK

Greek 101-102 Classical Greek Continuous course; 3 lecture hours; 3-3 credits. • Introduction to Classical Greek, with readings in Greek and English from representative authors of the Classical period.

Greek 201-202 Readings in Classical Greek Continuous course 3 lecture hours; 3-3 credits. • Prerequisite: Greek 101-102. First semester: selections from the literature of tragedy and the lyric writings of Sophocles, Euripides, Sappho, and Archilochus. Second semester: readings of selected Golden Age works of Aeschylus and Pindar.

COURSES IN HEBREW

Hebrew 101-102 Elementary Hebrew Continuous course; 3 lecture and 2 laboratory hours. 4-4 credits. • Elementary grammar, reading, and oral drill.

Hebrew 201-202 Intermediate Hebrew Continuous course; 3 lecture hours; 3-3 credits. • Rapid review of the essentials of grammar; conversation, readings in Hebrew literature.

COURSES IN HISTORY

History 101, 102 History of Civilization Semester courses; 3 lecture hours. 3, 3 credits. • A survey of the political, social, economic, cultural, and religious elements of world history from earliest man to the present time. First semester: pre-literary history to 1648. Second semester: 1648 to the present.

History 103, 104 History of Modern Europe Semester courses; 3 lecture hours, 3, 3 credits. • An introduction to the political, economic, social, and intellectual history of Europe in its world setting from the Renaissance to the present. First semester: 1500-1815. Second semester: 1815 to the present.

NOTE: History 101, 102 or 103, 104 are prerequisite to all advanced courses in European, African, and Asian history. Degree credit, however, will not be granted for both 101, 102 and 103, 104. History 201, 202 is prerequisite for all advanced courses in American history. In exceptional cases, permission of the instructor will be accepted in lieu of the prerequisites.

History 201, 202 American History Semester courses; 3 lecture hours. 3, 3 credits. • A general introduction to the history and civilization of the United States from the Age of Discovery to the present, with emphasis on the forces and processes that were major influences in the development of American institutions and ideas. First semester: through 1865. Second semester: 1865 to the present.

History 301 Ancient Greece Semester course; 3 lecture hours. 3 credits. • The history of Greece from the Aegean Civilizations through the Hellenistic Empire.

History 302 Ancient Rome Semester course; 3 lecture hours. 3 credits.
• The history of the development of Rome from the early Etruscan period through the decline of the Roman Empire in the West.

History 303, 304 The Middle Ages Semester courses; 3 lecture hours. 3, 3 credits. • A survey of the political, social, economic, religious, and cultural history of the European and Mediterranean communities from the decline of the Roman Empire to Renaissance times. First semester: The breakup of the Graeco-Roman civilization to the Crusades. Second semester: The high middle ages to the disintegration of medieval society.

History 305 The Renaissance Semester course; 3 lecture hours. 3 credits.
• A history of the secularization of life, thought, and culture occurring in western Europe between the fourteenth and sixteenth centuries.

History 306 The Reformation Semester course; 3 lecture hours. 3 credits. • A study of the material and spiritual forces of the sixteenth and early seventeenth centuries involved in the cause, course, and consequences of the great upheaval that broke the unity of medieval Christendom.

History 307, 308 The Ancient Near East Semester course; 3 lecture hours. 3, 3 credits. • A study of the ancient Near Eastern civilizations of Mesopotamia, Egypt, Anatolia, and Syria-Palestine, from the preliterate period to that of the Achaemenid Empire of the Persians. First semester: pre-literate period to the end of Kassite rule in Babylonia (c. -1160 B.C.). Second semester: the rise and fall of the great Neo-Assyrian, Neo-Babylonian, Hebrew, and Persian Empires (c. -331 B.C.).

History 309, 310 History of England Semester courses; 3 lecture hours. 3, 3 credits. • The origin, rise, and growth of Britain. Emphasis upon the development of English political ideas and institutions, and the significance of Britain in world affairs. First semester: earliest records to the Restoration. Second semester: the Restoration to the present.

History 311, 312 History of Russia Semester courses; 3 lecture hours. 3, 3 credits. • Russian history from its origins to the present, emphasizing the development of political and social institutions and Russia's unique position between Europe and Asia. First semester: origins to 1861. Second semester: 1861 to the present.

History 315, 316 History of the South Semester courses; 3 lecture hours. 3, 3 credits. • A regional history placing particular emphasis upon the distinctive culture and problems of the South and of its significance in the history of the United States. First semester: Old South, from Colonial period to 1861. Second semester: New South, from 1865 to the present.

History 317, 318 Modern China Semester courses; 3 lecture hours: 3, 3 credits. • First semester: the Confucian culture state under Ch'ing, confrontation with the West, and collapse (1644-1900). Second semester: Intellectual, political, and social revolution; emergence and development of the People's Republic.

History 319 Economic History of the United States Semester course; 3 lecture hours. 3 credits. • A study of the American economic development from colonial beginnings to the present, treating such topics as agriculture, industry, commerce, finance, economic causes and effects of wars, inter-relationships of government and business, role of the entrepreneur, and the economic basis of cultural progress.

History 321 The American Revolution Semester course; 3 lecture hours. 3 credits. • A study of the economic, intellectual, institutional, and constitutional changes in British North America which culminated in the American Revolution.

History 323 History of the American Frontier Semester course; 3 lecture hours. 3 credits. • A survey of the western movement in the United States from the time the first outposts were established to the end of the frontier in the nineteenth century. Particular attention to the influence of the frontier upon the American mind and ideals.

History 326 The Early National Period, 1783-1801 Semester course; 3 lecture hours. 3 credits. • A study of the Confederation and Federalist periods in the United States with emphasis on the formation of the Constitution and the political, economic, and cultural institutions of the American nation.

History 327 History of India Semester course; 3 lecture hours. 3 credits. • This course will cover the early history, Hindu and Muslim periods, Gandhi and independence, the partition of India, Nehru's era, and present-day India. The impact of the foreign invasions, including the threat from Red China and India's outlook and its future in the present-day world.

History 329, 330 History and Culture of the Orient Semester course; 3 lecture hours. 3, 3 credits. • The development of the civilization of India, China, and Japan, their influences, the transformation of the Far East under the influence of Western imperialism and industrialism, the modern Orient, including the impact of the world wars and revolutions. First semester: To 1853. Second semester: From 1853 to the present.

History 331 Europe, 1648-1815 Semester course; 3 lecture hours. 3 credits. • A study of Europe from the Treaty of Westphalia to the Congress of Vienna, with emphasis upon the Old Regime in France, the French Revolution, and the Napoleonic Era.

History 332 Europe, 1815-1914 Semester course; 3 lecture hours. 3 credits. • A study of Europe after Vienna with emphasis upon the development of liberalism and nationalism, the rise of fascism and communism, and the diplomatic background to World War I.

History 333 History of Japan to the Nineteenth Century Semester course; 3 lecture hours. 3 credits. • An introduction to the development of Japanese culture: its social, religious, and economic aspects from earliest times to the nineteenth century.

History 334 History of Modern Japan Semester course; 3 lecture hours. 3 credits. • Political and social development of Japan in the nineteenth and

twentieth centuries, with special emphasis on Japan's response to Western pressures and her rise to world power.

History 336 Europe Since 1914 Semester courses; 3 lecture hours. 3 credits. • A historical survey of contemporary Europe from the First World War through the Second World War to the Cold War with an emphasis on social and political relationship and origin of ideology.

History 337, 338 History of Islam Semester course; 3 lecture hours. 3, 3 credits. • First semester: history of Islam from its beginning to 1453. Second semester: from 1453 to the present.

History 339, 340 The British Empire and Commonwealth Semester courses; 3 lecture hours. 3, 3 credits. • A study of British expansion with particular reference to the origins and development of the British Empire and the Commonwealth of Nations. First semester: to 1783. Second semester: since 1783.

History 341 European Diplomatic History, 1815-1960 Semester course; 3 lecture hours. 3 credits. • A historical examination of the foreign policies of the major European nations with emphasis on the diplomatic settlements which have affected major alterations in world power relationships. Full consideration will be given to economic and social forces, both European and global, underlying those changes.

History 343, 344 Virginia History Semester courses; 3 lecture hours. 3, 3 credits. • A study of the political, economic, and cultural developments in the colony and Commonwealth of Virginia. First semester. Elizabethan period to 1789. Second semester: 1789 to the present.

History 346 Colonial America, 1607-1787 Semester course; 3 lecture hours. 3 credits. • An examination of the Colonial origins of American institutional development including relevant European influences, political and constitutional evolution, and cultural and economic aspects of early American life.

History 347, 348 A History of Germany Semester courses; 3 lecture hours. 3, 3 credits. • A study of Germany from the rise of Prussia to the present. First semester: a study of the political and social development of the German states, beginning with an analysis of the rise of Prussia, followed by an extensive treatment of the Napoleonic Wars, and Germany's struggle for unity and constitutional government in the nineteenth century. Second semester: a study of Bismarckian diplomacy and Wilhelmian politics, the First World War, Weimar Republic, its fall, and the rise of Nazi Germany, with a review of post-World War II Germany to the present.

History 349, 350 A History of France Semester courses; 3 lecture hours. 3, 3 credits. • First semester: history of France from Gallo-Roman times to the end of the reign of Louis XV (1774). Second semester: from Louis XVI to the present.

History 360 American Labor History Semester course; 3 lecture hours. 3 credits. • A survey of the development of American labor from colonial times to the present, with emphasis on the period since the Industrial

Revolution. Particular attention is given to the ideological conflicts within organized labor and to the relations between labor and other elements of society.

History 401, 402 History of Latin America Semester courses; 3 lecture hours. 3, 3 credits. • A survey of Latin American history from pre-Columbian times to the present, covering political, economic, and cultural development, with emphasis upon relations of the Latin American republics with the United States. First semester: to 1825. Second semester: since 1825.

History 403, 404 Civil War and Reconstruction Semester courses; 3 lecture hours. 3, 3 credits. • A history of events leading up to the outbreak of hostilities. First semester: the major campaigns and conditions on the home front. Second semester: a presentation of Appomattox and the Reconstruction era following the surrender in 1865.

History 405, 406 Diplomatic History of the United States Semester courses; 3 lecture hours, 3, 3 credits. • A historical study of diplomatic negotiations and foreign relations of the United States, with emphasis on the background of diplomatic disputes and the factors leading to their settlement. First semester: to 1877. Second semester: since 1877.

History 407 Tudor and Stuart England Semester course; 3 lecture hours. 3 credits. • An interpretive study of the development of early modern England from 1485 to 1714 with emphasis on political, economic, and social history.

History 410 Americans from Africa: A History Semester course; 3 lecture hours. 3 credits. • A survey of the history and contributions of Negro Americans from the African background to the present time. This course has been designed to be offered through a series of television lectures with seminars held on campus and at other points. (Same as Afro-American Studies 410).

History 411, 412 History of Africa Semester courses; 3 lecture hours. 3, 3 credits. • First semester: a history of Africa from prehistoric times through World War II. Second semester: from 1945 to the present, stressing the emergence of the African nations. (Same as Afro-American Studies 411, 412.)

History 413 History of Brazil Semester course; 3 lecture hours. 3 credits. • A survey of the development of Brazilian culture and institutions from the Portuguese occupation of eastern South America through the Colonial period, independent empire, and the republic to the present time.

History 414 History of Mexico Semester course; 3 lecture hours. 3 credits. • The development of the culture and social structure of the Mexican people and nation since the days of the Aztecs. Particular attention will be given to social and cultural matters and to the more recent period.

History 417 The Gilded Age and Progressivism Semester course; 3 lecture hours. 3 credits. • The history of the United States during the period

1877-1917, with emphasis on industry, labor, agrarian movements, imperialism, and reform.

History 418, 419 The United States Since 1917 Semester courses; 3 lecture hours. 3, 3 credits. • An analysis of United States political, social, economic, and cultural institutions in the modern world, with emphasis on the interplay of domestic and foreign policy. First semester: United States between the wars. Second semester: World War II to the present.

History 421, 422 Cultural and Intellectual History of the United States Semester courses; 3 lecture hours. 3, 3 credits. • The development of American life and thought, with emphasis on trends in social and religious ideas, patterns of living, and expressions in literature and the arts. First semester: Colonial period to 1865. Second semester: 1865 to the present.

History 425, 426 Constitutional History of the United States Semester courses; 3 lecture hours. 3, 3 credits. • An analysis of the development of the American constitutional system and constitutional thought, emphasizing English background, problems of government organization, judicial review, the controversy over state sovereignty, significant interpretative problems, and the recently changing role of government in America.

History 427 The Age of Jefferson, 1800-1824 Semester course; 3 lecture hours. 3 credits. • A study of the era of the Virginia Dynasty with emphasis on the maturation of the American political, economic, and cultural institutions and ideas.

History 428 Jacksonian America, 1824-1848 Semester course; 3 lecture hours. 3 credits. • A study of the Jacksonian period with emphasis on the democratization of American life, the westward movement, and the conflicting forces of nationalism and sectionalism.

History 429, 430 Modern European Intellectual History Semester courses; 3 lecture hours. 3, 3 credits. Recommended prerequisites: Philosophy 201, 202; Sociology 318. • First semester: an examination of the major currents of European thought from the Scientific Revolution through the Enlightenment. Second semester: European thought from the Age of Romanticism to the present.

History 431, 432 Senior Seminar in American Historiography and Interpretation Semester courses; 3 lecture hours. 3, 3 credits. • An introduction to questions in historiography, meaning, methodology, and interpretation in the teaching and writing of American history. First semester: an examination of the nature of the historical discipline. Second semester: an introduction to the variety of interpretations of problems in American history.

History 441, 442 Senior Seminar in European Historiography and Interpretation Semester courses; 3 lecture hours. 3, 3 credits. • An introduction to questions in historiography, meaning, methodology, and interpretation in the teaching and writing of European history. First semester: an examination of the nature of the historical discipline. Second semester: an introduction to the variety of interpretations of the problems of European history from Herodotus to Toynbee.

History 461-462 Archival and Historical Administration Continuous course; 3 lecture hours. 3 workshop hours. 3-3 credits. First semester: an examination of the development of archival administration with emphasis on modern techniques and practices of archival and historical administration. Second semester: workshop in which each student will receive on-the-job training in various phases of archival administration.

History 497 Independent Study Semester course; variable credit. 2-4 credits per semester maximum total of 6 credits. Open generally only to students of junior and senior standing who have acquired 12 credits in the departmental disciplines. Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course.

COURSES IN ITALIAN

Italian 101-102 Elementary Italian Continuous course; 3 lecture and 2 laboratory hours. 4-4 credits. Elementary grammar, reading, and oral drill.

Italian 201-202 Intermediate Italian Continuous course; 3 lecture hours; 3-3 credits. • Rapid review of the essentials of grammar; conversation, readings in Italian literature.

Italian 301, 302 Survey of Literature Semester courses; 3 lecture hours. 3,3 credits. Prerequisite: Italian 201-202. • A survey of Italian literature from the Renaissance through the twentieth century. First semester: the Renaissance through the eighteenth century. Second semester: the nineteenth and twentieth centuries.

COURSES IN LANGUAGE SKILLS

Language Skills 101-102 Language For Performing Arts Majors Continuous course; 3 lecture hours. 3-3 credits. • A study principally of the structure and pronunciation of French, German, and Italian. **Reserved exclusively for voice and drama majors in The School of the Arts.**

COURSES IN LATIN

Latin 101-102 Elementary Latin Continuous course; 3 lecture hours. 3-3 credits. • First semester: a study of the Latin language with emphasis on the Latin elements found in English. Latin vocabulary. Second semester: introduction to Latin authors and related aspects of Roman civilization.

Latin 201-202 Intermediate Latin Continuous course; 3 lecture hours. 3-3 credits. • Brief grammar review with a parallel study of political and literary trends and developments as found in several of the major Latin writers. First semester: prose, with emphasis on Cicero, Pliny the Younger, and Sallust. Second semester: poetry, with selected readings from Catullus, Tibullus, Ovid, and Vergil.

COURSES IN MASS COMMUNICATIONS

Mass Communications 101 Mass Communications Semester course; 3 lecture hours. 3 credits. • The influence of, and techniques used by, mass media. Origin of newspapers and periodicals and their evolution to mass circulation journalism of today. Structure, organization, management, content, and operation of radio, television, and motion picture industries. Attention is paid to roles of advertising and public relations.

Mass Communications 181 Principles of Advertising Semester course; 3 lecture hours. 3 credits. • A survey of all forms of advertising; principles of layout copy; production methods; campaign preparation; media selection.

Mass Communications 186 Advertising Production Semester course; 3 lecture hours. 3 credits. • Various production methods are studied to determine their specific applications to advertising material. Field trips to production plants are included.

Mass Communications 203 News Reporting Semester course; 3 lecture hours. 3 credits. • Study of the techniques of news reporting on small daily, large daily, and weekly newspapers.

Mass Communications 210 Mass Media Graphics Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: Mass Communications 101. • A lecture-laboratory course on the functions of visual and graphic communication in news in the print and electronic media, involving creative typographic and layout design, pictures and nonverbal elements of communication and perception.

Mass Communications 215 History of Communications Semester course; 3 lecture hours. 3 credits. • A study of the development of mass media in America from Colonial times to the present in the context of the social, political, and economic factors that have contributed to change.

Mass Communications 261 Principles of Broadcasting Semester course. 3 lecture hours. 3 credits. Prerequisite: Mass Communications 101. • A basic journalistic introduction to the principles of broadcasting, including organization, structure, and function of stations.

Mass Communications 281 Advertising Media Selection Semester course; 3 lecture hours. 3 credits. • A study of media terminology and mathematics, including an analysis of retail and general rate structure in all media.

Mass Communications 282 Advertising Communication Semester course; 3 lecture hours. 3 credits. Prerequisite: Mass Communications 181. • Principles of verbal and visual communication in creating and translating advertising ideas into print and broadcast terms. Study of aesthetic, emotive, and informative appeals.

Mass Communications 301-302 Basic Photo-Journalism Continuous course; 2 lecture and 2 laboratory hours. 3-3 credits. • Study of fundamentals of photography and techniques of camera use in relation to the fields of journalism and visual communications. (Same as Photography 301-302.)

Mass Communications 303-304 Advanced Reporting Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Mass Communications 203. • Detailed study of the techniques of securing news as well as the sources of news in the fields of public interest and of judgment in the style of news writing. Emphasis is placed on developing clarity and maturity in the student's writing. Practical exercises and assignments to cover actual news situations are a part of this course.

Mass Communications 305 Editing and Makeup Semester course; 1 lecture and 3 laboratory hours. 3 credits. Prerequisite: Mass Communications 203. • Practice in copyreading and editing telegraphy copy, a study of copyreading symbols and practices, and a survey of the makeup and design of leading American dailies.

Mass Communications 308 Communications Law Semester course; 3 lecture hours. 3 credits. • Study of legal limitations affecting publishing, advertising, broadcasting, telecasting, and legal philosophy relating to the media of communications.

Mass Communications 321 Publicity Semester course; 3 lecture hours. 3 credits. • How to plan, produce, and place publicity copy for various organizations and clients.

Mass Communications 341 Feature and Article Writing Semester course; 3 lecture hours. 3 credits. • Practice in preparing articles and features for newspapers and magazines. The emphasis is on creative journalistic writing and development of writing skills.

Mass Communications 343 Magazine Editing and Materials Preparation semester course; 3 lecture hours. 3 credits. • Study of preparation of copy and illustrative materials for periodical publication. Attention given to industrial, agricultural, business, professional, and denominational periodicals.

Mass Communications 361 Newsfilm Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: Mass Communications 363-364. • A study of the techniques and use of 16mm motion picture film in coverage of news for television.

Mass Communications 363-364 Advanced Broadcast Reporting Continuous course; 2 lecture and 2 laboratory hours. 3-3 credits. Prerequisites: Mass Communications 101, 203, 261, and 365. • A detailed study of the techniques of securing news and style of news writing for broadcast reporting.

Mass Communications 365 Radio-Television Production Semester course; 1 lecture and 4 laboratory hours. 3 credits. Prerequisites: Mass Communications 101, 203. • Actual practice in radio and television production skills involving studio cameras, audio, motion-picture projection, video-tape operation, and control-room switching.

Mass Communications 381 Creative Strategy Semester course; 3 lecture hours. 3 credits. Prerequisite: Mass Communications 282. • Development of creative strategies to accomplish advertising objectives. Students de-

velop and defend campaign themes and message ideas, including print layouts and television story-boards.

Mass Communications 382 Media Strategy Semester course; 3 lecture hours. 3 credits. Prerequisite: Mass Communications 381. • Development of media strategies to accomplish advertising objective. The evaluation of media vehicles in terms of creative requirements, budget limitations, audience characteristics, and cost efficiency.

Mass Communications 384 Consumer Behavior Semester course; 3 lecture hours. 3 credits. Prerequisite: Mass Communications 282. • A study of advertising as a social institution and a communication process. Incorporates concepts developed in the behavioral sciences as means of explaining consumer motivation and behavior.

Mass Communications 391, 392 Retail Advertising Layout and Production Semester course; 3 lecture hours. 3,3 credits. • A specific course in the preparation, placing, and proofing of retail advertising in daily newspapers and local weekly and monthly publications. Its aim is to improve the appearance, effectiveness, individuality, originality, and unity of space advertising in competition with other advertising in the periodical publications listed above. Emphasis is placed on the ingenious and creative use of accepted practical and economical layout and production facilities rather than on pure creativity.

Mass Communications 393 Television and Radio Advertising Semester course; 3 lecture hours. 3 credits. • Principles and practices of successful radio-television advertising; emphasis on media research, rate structure, programming, creativity in broadcast commercials.

Mass Communications 401-402 Advanced Photo-Journalism Continuous course; 2 lecture and 2 laboratory hours. 3-3 credits. Prerequisites: Mass Communications 301-302 or evaluation of portfolio. • Advanced photographic techniques with emphasis on problems of photographing people in their environment and events as they occur. Second semester's work will emphasize student's planning and executing his own picture stories while concerning himself with continuity and emotional appeal of the photograph. Student must provide film and enlarging paper. (Same as Photography 321-322.)

Mass Communications 407 Newspaper Management Semester course; 3 lecture hours. 3 credits. • Newspaper operators from the standpoint of business and editorial supervision. A study of newspaper plants, advertising, circulation, and business.

Mass Communications 411, 412 Field Work Semester courses; 4 laboratory hours. 3, 3 credits. • Student works in the field under close supervision of instructor and work supervisor, the latter grading the student on various phases of his on-the-job employment and submitting these reports to the student's advisor. Selected students will take part in departmental programs of communications internships in which they will be enabled to gain practical experience by working with area newspapers, public relations offices, and radio and television stations.

Mass Communications 419 Journalism in the Schools Semester course; 3 lecture hours. 3 credits. • Study of school newspapers, magazines, and yearbooks, and of problems relating to staff selection, content of publications, copy, layout, advertising, printing, and business phases.

Mass Communications 422 Public Relations Semester course; 3 lecture hours. 3 credits. • Study of public relations principles and practices, with special attention to tools, media, responsibilities, and potentialities.

Mass Communications 425 Public Opinion Semester course; 3 lecture hours. 3 credits. • The formation, reinforcement, and change of opinions. The role of major social and political institutions and of the mass media upon attitude change.

Mass Communications 445 Business and Industrial Journalism Semester course; 3 lecture hours. 3 credits. • Study of and practice in writing for business, industrial, and institutional publications. An examination of the objectives, content, design, printing, and distribution of company publications.

Mass Communications 467 Broadcast Newsroom Management Semester course; 3-hour seminar. 3 credits. Prerequisites: Mass Communications 363-364. • Skills in operation of a radio or television newsroom from the standpoint of the news manager. A study of station organization, business demands, and managerial skills.

Mass Communications 481-482 Advertising Campaigns I and II Continuous course; 3 lecture hours. 3-3 credits. • Campaigns will be evaluated, and each student will plan one or more campaigns.

Mass Communications 483 Advertising Management Semester course; 3 lecture hours. 3 credits. • Use of the problem-solving approach to management problems; advertising department organization; preparation of advertising budgets; advertising agency relations.

Mass Communications 484 Current Advertising Analysis Semester course; 3 lecture hours. 3 credits. • Discussion of current advertising campaigns and media, creative and research trends. Special attention is given to the literature of the field.

Mass Communications 485 Direct Mail Planning and Production Semester course; 3 credits. • A study of the direct mail practices used in planning, creating, and scheduling effective direct mail advertising.

Mass Communications 489, 490 Sales Promotion by Manufacturers and Media Semester courses; 3, 3 credits. • Describes and analyzes sales promotion on three distinct levels: between a manufacturer, his distributors, and dealers, contact between a manufacturer and the consumer of his products, activities within a company's own marketing division which supplement personal selling and advertising. Merchandising activities and aids of all media are covered.

Mass Communications 491 Advertising Media Workshop Semester course; 3 credits. Prerequisite: Mass Communications 281 or permission

of instructor or department chairman. • The application of media principles, research, and techniques in the evaluation and selection of consumer and trade media. Students will develop total media plans with objectives, strategy, rationale, schedules, and budgets.

Mass Communications 492 Seminar in Economic, Social and Legal Aspects of Advertising Semester course; 3 credits. • An examination of the role of advertising in modern life in America in light of historical and recent development in advertising and distribution.

Mass Communications 493 Tourist Advertising and Promotion Semester course; 3 lecture hours. 3 credits. • A study of advertising and sales promotion principles and practices used in planning and executing programs in the tourist industry, the role and scope of tourist advertising by commercial firms, government agencies, trade associations, and other institutions. The course will be specifically concerned with tourist advertising and promotion in Virginia.

Mass Communications 494 Industrial and Professional Advertising Semester course; 3 lecture hours. 3 credits. • How industrial advertising differs from consumer advertising. Forms of industrial advertising. The industrial advertising budget. Career opportunities in industrial advertising. How professional advertising differs from consumer advertising.

COURSES IN MATHEMATICS

Additional mathematical sciences courses in statistics and computer science may be found on pages 212 and 169, respectively.

Students registering for Mathematics 100, 113, 114, 115, 116, 200, 204, 211, Computer Science 201, or Statistics 213 must have taken the VCU mathematics placement test within the one-year period immediately preceding the beginning of the course. The only exception to this policy is the case in which the stated alternate prerequisite course has been completed at VCU.

No more than six hours credit may be earned in mathematics courses numbered lower than 200.

Mathematics 100 Unitized Mathematics Semester course; 3 laboratory hours. 0 or 3 credits, depending upon level of material. • Students requiring any of the mathematics courses numbered 001, 101, 102, and 107, listed below, should register in Mathematics 100. On the basis of his background and placement of examination scores, a student will be assigned to a self-paced course which utilizes audio-visual and tutorial support to permit the student to achieve his educational objectives.

Mathematics 001 Laboratory and Tutorial Unitized course; 3 laboratory hours. No credit. Prerequisite: permission of the department. • The purpose of this course is to provide laboratory and tutorial instruction for those seeking remediation or review of high school mathematics.

Mathematics 101 College Algebra Unitized course; 3 lecture-laboratory-tutorial hours. 3 classes. 3 credits. Prerequisites: two years of high school

algebra, plane geometry, and a satisfactory score on the mathematics placement test. • A self-paced course in the college algebra, using audio-visual and tutorial support in a laboratory setting.

Mathematics 102 Trigonometry Unitized course; 3 lecture-laboratory-tutorial hours. 3 classes. 3 credits. Prerequisite: Mathematics 101 or a satisfactory score on the mathematics placement test. • A self-paced course in trigonometry, using audio-visual and tutorial support in a laboratory setting.

Mathematics 107 Algebra and Trigonometry Unitized course; 3 lecture-laboratory-tutorial hours. 3 classes. 3 credits. Prerequisites: high school trigonometry and a satisfactory score on the mathematics placement test. • A self-paced course in college algebra and trigonometry, using audio-visual and tutorial support in a laboratory setting.

Mathematics 113-114 Survey of Finite Mathematics Continuous course; 3 lecture hours. 3-3 credits. Prerequisites: one year of high school algebra, plane geometry, and a satisfactory score on the mathematics placement test. • Introduction to sets, logic, finite probability, elementary statistics, matrices and determinants, linear programming, and the theory of games.

Mathematics 115-116 Modern Elementary Mathematics Continuous course. 3 lecture hours. 3-3 credits. Prerequisites: one year of algebra, plane geometry, and a satisfactory score on the mathematics placement test. • Modern concepts of mathematics, history and development of number systems, algebra and geometry from the teacher's point of view. (Open only to majors in elementary, early childhood, and special education.)

Mathematics 200-201-202 Calculus with Analytic Geometry Continuous course. 4 lecture hours. 4-4-4 credits. Prerequisite: Mathematics 102 or 107 or satisfactory score on the mathematics placement test. • Limits, continuity, derivatives, differentials, antiderivatives, and definite integrals. Applications of differentiation and integration. Selected topics in analytic geometry. Partial differentiation, multiple integration, and infinite series.

Mathematics 204 Elements of Calculus Semester course; 4 lecture hours. 4 credits. Prerequisite: Mathematics 101 or 114 or satisfactory score on the mathematics placement test. • A conceptual course containing an introduction to sequences, functions, limits, derivatives and their applications, series, integration, and functions of several variables.

(Not open to students in chemistry, engineering, mathematical sciences, or physics.)

Mathematics 211 Mathematical Structures Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 102 or 107 or satisfactory score on the mathematics placement test. • A brief introduction to logic and set theory. The study of a mathematical topic, selected to enlarge the student's view of mathematics.

Mathematics 300 Sets, Logic, and the Real Number System Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 200. • An

introduction to the basic concepts of set theory and logic, culminating in a discussion of the construction of the real number system.

Mathematics 301 Differential Equations Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 202. • Solution of ordinary differential equations of first order. Linear differential equations with constant coefficients using operator methods. Series solutions and applications.

Mathematics 305 Elementary Number Theory Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 211. • Divisibility, congruences. Euler phi-function, Fermat's Theorem, primitive roots, Diophantine equations.

Mathematics 309 Introduction to Probability Theory Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 200. • A study of the mathematical theory, including finite and infinite sample spaces, random variables, discrete and continuous distributions, mathematical expectation, functions of random variables, sampling distributions.

Mathematics 310 Linear Algebra Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 201. • Systems of linear equations, vector spaces, linear dependence, bases, dimensions, linear mappings, matrices, determinants, quadratic forms, orthogonal reduction to diagonal form, eigenvalues, geometric applications.

Mathematics 401-402 Algebraic Structures Continuous course; 3 lecture hours. 3-3 credits. Prerequisites: Mathematics 211 and 310. • A study of algebraic structure; groups, rings, fields, and vector spaces. Homomorphisms and isomorphisms.

Mathematics 403 Intermediate Probability Theory Semester course; 3 lecture hours. 3 credits. Prerequisites: Mathematics 202 and 309. • Fundamental concepts of the theory of probability. Random variables and probability distributions. Moments and moment generating functions. Functions of random variables, special probability distributions and their applications.

Mathematics 405 Modern Geometry Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 202; Corequisite: Mathematics 310. • Topics in Euclidean projective and non-Euclidean geometries from a modern viewpoint.

Mathematics 407-408 Analysis I, II Continuous course; 3 lecture hours. 3-3 credits. Prerequisites: Mathematics 202, 211, 310; or consent of instructor. • Theoretical aspects of calculus: sequences, limits, continuity, infinite series, series of functions, integration, differential geometry.

Mathematics 409-410 General Topology I, II Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Mathematics 211 or equivalent. • Foundations and fundamental concepts of point-set topology. Topological spaces, convergence, connected sets, compactness, product spaces, quotient spaces, function spaces, separation properties, metrization theorems, mappings, compactification.

Mathematics 411 Applied Linear Algebra Semester course; 3 lecture hours. 3 credits. Prerequisites: Mathematics 301 and 310. • The algebra of matrices, the theory of finite dimensional vector spaces, and the basic results concerning eigenvectors and eigenvalues, with particular attention to applications.

Mathematics 412 Applied Complex Analysis Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 407 or 417. • The algebra and geometry of complex numbers, analytic functions, integration, series, contour integration, analytic continuation, conformal mapping, with particular attention to applications.

Mathematics 415 Numerical Analysis I Semester course; 3 lecture hours. 3 credits. Prerequisites: Mathematics 301 and Computer Science 302. • Solutions of equations, interpolation and approximations, numerical differentiation and integration, and numerical solution of initial value problems in ordinary differential equations. Selected algorithms will be programmed for solution on computers.

Mathematics 416 Numerical Analysis II Semester course; 3 lecture hours. 3 credits. Prerequisites: Mathematics 310 and 415. • The solution of linear systems by direct and iterative methods, matrix inversion, the evaluation of determinants, and the calculation of eigenvalues and eigenvectors of matrices. Application to boundary value problems in ordinary differential equations. Introduction to the numerical solution of partial differential equations. Selected algorithms will be programmed for solution on computers.

Mathematics 417-418 Methods of Applied Mathematics Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Mathematics 301. • Vector analysis, matrices, complex analysis, special functions. Legendre and Hermite polynomials, Fourier differential equations, boundary-value and initial value problems.

Mathematics 420 Game Theory and Linear Programming Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 310. • The mathematical basis of game theory and linear programming. Matrix games, linear inequalities and convexity, the minimax theorem, optimal strategies,

Mathematics 497 Independent Study Semester course; variable credit, 2-3-4 credits per semester, maximum 4 credits per semester; maximum total of 6 credits. Generally open only to students of junior or senior standing who have acquired at least 12 credits in the departmental discipline. Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course. • The student must submit a proposal for investigating some area or problem not contained in the regular curriculum. The results of the student's study will be presented in a report.

COURSES IN PHILOSOPHY

Philosophy 101, 102 Introduction to Philosophy Semester courses; 3 lecture hours. 3, 3 credits. • An introduction to the main branches and

problems of philosophy. The first semester will emphasize logic, cosmology, and theory of knowledge; the second semester will emphasize ethics, social and political philosophy, and related topics.

Philosophy 201, 202 History of Philosophy Semester courses; 3 lecture hours. 3, 3 credits. • A survey of the development of critical and speculative thought in the West from ancient beginnings to the present. First semester: Thales to Ockham; second semester: Descartes to the twentieth century.

Philosophy 221 Informal Logic Semester course; 3 lecture hours. 3 credits. Prerequisite: consent of instructor. • The nature of sound reasoning, including a study of informal fallacies, stereotypic thinking, prejudices, the nature and function of language, definition and classification, and elementary scientific reasoning. Practical applications will be stressed, drawing upon contemporary materials.

Philosophy 222 Formal Logic Semester course; 3 lecture hours. 3 credits. Prerequisite: consent of instructor. • Introduction to formal deductive logic, including both the traditional theory of the syllogism and the basics of modern symbolic logic.

Philosophy 227 Introduction to Ethics Semester course; 3 lecture hours 3 credits. • A study of the major ethical systems in Western philosophy Plato, Aristotle, Epicureanism, Stoicism, religious ethics, Kant, and Mill, among others, will be considered.

Philosophy 311 American Pragmatism Semester course; 3 lecture hours. 3 credits. Prerequisite: consent of instructor. • A critical examination of the major writings of C. S. Peirce, William James, and John Dewey.

Philosophy 319 Contemporary Philosophy Semester course; 3 lecture hours. 3 credits. Prerequisite: six hours in philosophy or consent of instructor. • A study of the philosophical thought of the 20th century, concentrating on the analytic movement characteristic of Anglo-American philosophy and significant individual thinkers who stand outside this movement. Includes readings from Moore, Russell, Wittgenstein, the logical positivists, ordinary language philosophers, Quine, Whitehead, Bergson, and Maritain.

Philosophy 321, 322 Aesthetics Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: sophomore standing. • A critical survey of aesthetics from antiquity to the twentieth century. First semester: antiquity to the Renaissance; Second semester: the Renaissance to the present. Topics to be considered include: the nature of art, aesthetic experience, the aesthetic object, and aesthetic judgments. Specific attention will be given to aesthetic analysis in the arts of painting, music, architecture, and the motion picture.

Philosophy 323 Epistemology Semester course; 3 lecture hours. 3 credits. Prerequisite: six hours in philosophy or written consent of instructor. • An examination of the problems of knowledge, including theories of truth, knowledge of the external world and other minds, and the distinctions between knowledge and belief.

Philosophy 325 Metaphysics Semester course; 3 lecture hours. 3 credits. Prerequisite: six hours in philosophy or written consent of instructor. • A critical examination of man's attempt to understand the universe as a whole, including such issues as the mind-body problem, determinism, time, and the privacy of sensations.

Philosophy 326 Existentialism Semester course; 3 lecture hours. 3 credits. Prerequisite: Philosophy 101, 102 or consent of instructor. • An examination of the nature of truth, freedom, responsibility, individuality, and interpersonal relations as found in some principal writings of Kierkegaard, Nietzsche, Jaspers, Sartre, Heidegger, Camus, Buber, Marcel.

Philosophy 327 Ethical Theory Semester course; 3 lecture hours. 3 credits. • A study of the problems of philosophical ethics, including relativism, egoism, utilitarianism, intrinsic value, and the meaning and justification of ethical principles. Both historical and contemporary thinkers will be considered.

Philosophy 329 Business Ethics Semester course; 3 lecture hours. 3 credits. Prerequisite: consent of instructor. • A survey of the major ethical theories as they apply to business practices, including such topics as relationship of firms and employees, firms and other economic agents, firms and non-business groups, etc.

Philosophy 330 Advanced Logic Semester course; 3 lecture hours. 3 credits. Prerequisite: Philosophy 222. Mathematics 300, or written consent of instructor. • A thorough study of formal deduction as embodied in standard propositional and functional calculi. Course includes a treatment of the following topics: techniques for proving validity, truth functional analysis, quantification theory, relational arguments, and metalogic.

Philosophy 331 Philosophy of Science Semester course; 3 lecture hours. 3 credits. Prerequisite: six hours of philosophy or Mathematics 101-102 or equivalent, or written consent of instructor. • An examination of the bases of scientific inquiry in both the natural and social sciences; including a study of such topics as hypothesis formation and testing, and the nature of scientific laws, theories, and explanations.

Philosophy 335 Social and Political Philosophy Semester course; 3 lecture hours. 3 credits. Prerequisite: Philosophy 102, 227, or 327, or written consent of instructor. • A critical examination of political power and of the relationship between the individual and his society.

Philosophy 408 Indian Tradition Semester course; 3 lecture hours. 3 credits. Prerequisite: Philosophy 202 or Religious Studies 401. • A systematic analysis of the major theories of Indian religious and philosophical thought: Vedas, Upanishads, Gita, Charvaka, Jainism, Buddhism, the six systems of Hinduism, and contemporary developments. (Same as Religious Studies 408.)

Philosophy 410 Chinese and Japanese Traditions Semester course; 3 lecture hours. 3 credits. Prerequisite: Philosophy 201 or Religious Studies 401. • A systematic analysis of dominant religious and philosophical

theories in the tradition of China and Japan: Confucianism, Taoism, Chinese Buddhism, neo-Confucianism, Shinto, Japanese Buddhism, and contemporary developments. (Same as Religious Studies 410.)

Philosophy 430 Philosophy of Religion Semester course; 3 lecture hours. 3 credits. Prerequisite: Philosophy 101, 102, or 201, 202, or consent of instructor. • An introduction to the major problems and questions of religion and reason. Special reference will be made to the nature of God, the nature of man, the problem of evil, the source of good, immortality, and the basis of authority.

Philosophy 495 Topics in Philosophy Semester course; 3 lecture hours. 3 credits. Maximum total 6 credits in topics courses. Prerequisite: written consent of instructor. • An in-depth study of an individual philosopher, a particular philosophical problem or a narrowly defined period or school. See schedule of classes for specific topic to be offered each semester.

Philosophy 497 Independent Study Semester course; Variable credit, Maximum 4 credits per semester; maximum total for all independent study courses 6 credits. Open generally only to students of junior or senior standing who have acquired at least 12 credits in the departmental discipline. Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course. • An independent study course to allow interested majors in philosophy to do research, under the direction of a professor qualified in that field, in an area of major interest.

COURSES IN PHYSICS

Physics 101 Physics and Today's World Semester course; 3 lecture hours. 3 credits. • An introduction to the basic concepts of classical and modern physics with an emphasis on those principles which are particularly applicable in our modern world. For non-science majors.

Physics R103 Introductory Physics for Radiology Second semester; 3 lecture hours. 3 credits. • Properties of matter and basic principles of mechanics, electricity, and magnetism. (For radiologic technology students only.)

Physics 107-108 Physical Science Continuous course; 3 lecture and 2 laboratory hours. 4-4 credits. Prerequisite: satisfactory score on mathematics placement test. • A historical, cultural, philosophical, and semi-quantitative development of physical laws of nature. Designed primarily for non-science majors.

Physics 201-202 General Physics Continuous course; 3 lecture hours and 1 laboratory per week. 4-4 credits. Prerequisite: Mathematics 101-102 or 107. • First semester: basic concepts of motion, waves, and heat. Second semester: basic concepts of electricity, magnetism, light, and modern physics. Designed primarily for life-science majors.

Physics 207 University Physics I Semester course; 3 lecture and 3 laboratory hours. 4 credits. Corequisite: Mathematics 200. • A vector-

and calculus-based introduction to the fundamental concepts of mechanics and heat.

Physics 208 University Physics II Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisite: Physics 207; Corequisite: Mathematics 201. • A vector- and calculus-based introduction to the fundamental concepts of waves, electricity, magnetism, and optics.

Physics 315 Energy and the Environment Semester course; 3 lecture hours. 3 credits. Open to non-majors. Not applicable to the physics major. Prerequisite: junior or senior standing. • Man and his physical environment; a semi-quantitative study of man's physical needs for energy and environmental problems associated with these requirements.

Physics 320 Introduction to Modern Physics Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisites: Physics 208 or 202 and Mathematics 201. • A continuation of University Physics I and II. Foundations of modern physics including the Bohr theory of the atom, special relativity, X-rays, wave-particle duality, radioactivity, and nuclear physics.

Physics 331 Electric Circuits and Electronics Semester course; 3 lecture and 3 laboratory hours. 4 credits. Prerequisites: Physics 208 or 202. • Elements of dc and ac circuits, conduction phenomena in metals and semiconductors, and elements of electronics.

Physics 337 Classical Mechanics Semester course; 3 lecture hours. 3 credits. Prerequisites: Physics 207 or 202 and Mathematics 201. • Mechanics of particles, systems of particles, rigid bodies, continuous media, and wave motion.

Physics 340 Introduction to Statistical Physics and Thermodynamics Semester course; 3 lecture hours. 3 credits. Prerequisites: Physics 208 or 202 and Mathematics 201. • Introduction to classical thermodynamics, kinetic theory, and statistical mechanics.

Physics 351 Introduction to Quantum Physics Semester course; 3 lecture hours. 3 credits. Prerequisites: Physics 320 or consent of instructor. • An introduction to quantum physics using simple one-dimensional systems with applications to nuclear, solid state, and statistical physics.

Physics 362 Electromagnetism Semester course; 3 lecture hours. 3 credits. Prerequisites: Physics 208 or 202 and Mathematics 201. • Electrostatics, magnetism, and electromagnetic properties of matter.

Physics 471 Theoretical Mechanics Semester course; 3 lecture hours. 3 credits. Prerequisites: Physics 337 and Mathematics 301, or consent of instructor. • An introduction to advanced dynamics involving the Lagrangian and Hamiltonian formalisms.

Physics 476 Electromagnetic Theory Semester course; 3 lecture hours. 3 credits. Prerequisites: Physics 362 and Mathematics 301, or consent of instructor. Maxwell's equations of electromagnetism, vector and scalar potentials, electromagnetic waves, and radiation theory.

Physics 480 Quantum Mechanics Semester course; 3 lecture hours. 3 credits. Prerequisites: Physics 351. Mathematics 301, or consent of in-

structor. • Theoretical quantum descriptions with emphasis upon mathematical techniques. Schrodinger equation, hydrogen atom, eigenfunctions and eigenvalues, angular momentum and spin, and perturbation theory.

Physics 495 Topics in Physics Semester course. 3 lecture hours. 3 credits. Maximum total of 3 credits in topics courses. • An in-depth study of a selected topic in physics. See schedule of classes for specific topic to be offered each semester.

Physics 497 Independent Study Semester course. Variable credit, 1-3 credits per semester. Maximum total 3 credits. Open generally only to students of junior or senior standing who have acquired at least 12 credits in the departmental discipline. • Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course. • Directed projects in experimental or theoretical physics.

COURSES IN PHYSICAL SCIENCE

Physical Science 101 Elementary Geology Semester course; 3 lecture hours. 3 credits. • A descriptive approach to physical geology dealing with the history and structure of the earth, catastrophic events, and geology as it relates to the contemporary environment.

Physical Science 201 Elementary Astronomy Semester course; 3 lecture hours. 3 credits. • A descriptive approach to astronomy dealing with basic features of our solar system, our galaxy, and the universe.

Physical Science 203 Selected Topics in Astronomy Semester course; 3 lecture hours. 3 credits. Prerequisites: Physical Science 201 or equivalent background in astronomy. • An investigation of topics of current interest in astronomy and the methods used to study these subjects. Topics include eclipse, exploration of the solar system, evolution of the stars, properties of our galaxy, and the structure of the universe.

Physical Science 307 Introduction to Material Science Semester course; 3 lecture hours. 3 credits. Prerequisites: general chemistry and general physics. • A basic course in the relation of physical and mechanical properties of materials to their structure and environment. Includes introductions to crystallography, physical metallurgy, and ceramics with emphasis on materials in industrial applications.

Physical Science 308 Physical Metallurgy Semester course; 3 lecture hours. 3 credits. Prerequisite: Physical Science 307. • A course in principles of physical metallurgy investigating the origins of the structure and physical properties of metals and alloys. Contents include the metallic state, equilibrium diagrams, diffusion defects, physical properties, elastic and plastic deformations, and mechanical properties.

COURSES IN POLITICAL SCIENCE

Political Science 101 Elements of Political Science Semester course; 3 lecture hours. 3 credits. • This course will acquaint students with elements

and concepts involved in the study of politics. Attention also will be devoted to research methods applicable to political science.

Political Science 201, 202 American Government Semester courses; 3 lecture hours. 3, 3 credits. • A study of the American system of government, including the organization and functioning of national, state, and local government in the United States. First semester: essentials of American Government; federal institutions. Second semester: federal powers and functions; state and local governments.

Political Science 301 American Parties and Politics Semester course; 3 lecture hours. 3 credits. • A study of the historical development, organization, and methods of political parties in the United States.

Political Science 302 Black Political Thought Semester course; 3 lecture hours. 3 credits. • A historical and sociological perspective on the political and social ideas of black thinkers from David Walker to the present. (Same as Afro-American Studies 302.)

Political Science 305, 306 History of Political Thought Semester course; 3 lecture hours. 3, 3 credits. • A survey of political thought from the time of Plato to the present. First semester: leading political ideas of the ancient and medieval periods. Second semester: modern and contemporary thought.

Political Science 307 International Organizations and Institutions Semester course; 3 lecture hours. 3 credits. • The structure and operation of such organizations and regional institutions as the United Nations, the European Economic Community, the Organization for Economic Cooperation and Development, the Organization of American States, the Central American Common Market, the Latin American Free Trade Association, the North Atlantic Treaty Organization, and the Southeast Asia Treaty Organization.

Political Science 309 American Foreign Policy Semester course; 3 lecture hours. 3 credits. • An analytical survey of processes and practices in the formation of United States foreign policy, including an introduction to the goals, problems of implementation, and current challenges faced by policymakers.

Political Science 310 The National Policy Process Semester course; 3 lecture hours. 3 credits. Prerequisite: Political Science 201, 202 or consent of the instructor. • An analytical survey of policy formulation and operations of the United States Government at the national level, together with an examination of the impact of policy upon groups and individuals in American society.

Political Science 314 American Constitutional Law Semester course; 3 lecture hours. 3 credits. • A survey of the development of the Constitution through judicial interpretation. Supreme Court decisions dealing with federalism, the powers of Congress and the President, civil liberties, and civil rights will be analyzed.

Political Science 315 Communism: Theory and Practice Semester course; 3 lecture hours. 3 credits. • A study of the growth of communism and its approach to economic and social problems. A critical analysis will be given to the use of this theory and practice for world domination.

Political Science 321 Municipal Government and Administration Semester course; 3 lecture hours. 3 credits. • A study of the development, organization, and administration of cities in the United States. Special attention will be given to the problems and prospects of municipal government in Richmond and Virginia.

Political Science 322 State and Local Government in the United States Semester course; 3 lecture hours. 3 credits. • A study of the organization, problems, and politics of government and administration of the 50 states and their cities, counties, towns, and metropolitan areas, with special emphasis on the Virginia state and local government experience.

Political Science 324 Public Personnel Administration Semester course; 3 lecture hours. 3 credits. • An analysis of personnel management in government. Recruitment and selection, job and salary classification, work standards and training, and relations of public personnel to the executive and legislative branches of government will be included among the topics to be discussed.

Political Science 326 Contemporary Urban Problems Semester course; 3 lecture hours. 3 credits. • A study of urban affairs with particular reference to complex urban problems. An inventory will be made of contemporary urban problems and of devices for dealing effectively with them. Special attention will be given to new concepts, such as multi-jurisdictional planning. (Same as Urban Studies 326.)

Political Science 327 Seminar in Urban Problems and Solutions Semester course; 3 lecture hours. 3 credits. Prerequisite: Political Science 326 and/or consent of instructor. • A continuation of Political Science 326 with emphasis upon possible solutions to the problems of urban communities. (Same as Urban Studies 327.)

Political Science 330 Water Resources Problems Semester course; 3 lecture hours. 3 credits. • A review of the general technical and philosophical factors involved in the regulation of the quantity and quality of water with special reference to the evaluation of problems in the James River Basin.

Political Science 351 Government and Politics of Southeast Asia Semester course; 3 lecture hours. 3 credits. • A survey of the political problems growing out of colonialism, underdevelopment, nationalism, and big power struggles.

Political Science 402 Public Administration Semester course; 3 lecture hours. 3 credits. • A study of the concepts and practices of public administration in the United States. Particular attention will be given to the administrative procedures and practices of the national government and the government of Virginia.

Political Science 403 Principles and Practices of International Relations Semester course; 3 lecture hours. 3 credits. • A survey of world affairs with particular attention to economic resources, political diplomacy, power politics, and other tools of international relations.

Political Science 411, 412 Comparative Government Semester courses; 3 lecture hours. 3, 3 credits. • A comparative study of contemporary political systems, including some of the advanced democracies and emerging new nations. Emphasis will be given to patterns of political stability and adaptation to cultural, social, and economic change. First semester: a comparative study of the parallel development of parliamentary institutions in England, France, and Germany. Second semester: political institutions in Indonesia, Malaysia, and the Philippines.

Political Science 413 International Relations: 1870-1914 Semester course; 3 lecture hours. 3 credits. • A study of international relations from the time of the unification of Germany and Italy to the outbreak of World War I. Full consideration will be given to international economics and colonial affairs.

Political Science 452 Legal Rights and Responsibilities Semester course; 3 lecture hours. 3 credits. • A general survey of the most common legal problems facing the average citizen to aid in understanding basic fundamentals of law affecting private activities. Content to be designed to meet the interests of the class and cover such topics as wills, personal liability, real property law, and legal protection of ideas, writings, and art.

Political Science 497 Independent Study Semester course; variable credit, maximum 4 credits per semester; maximum total for all independent study courses 6 credits. Open generally only to students of junior or senior standing who have acquired at least 12 credits in political science. Determination of the amount of credit and permission of the instructor and department chairman must be obtained prior to registration for the course. • An independent study course allows a political science major or other student who meets the requirement to do research, under the direction of an instructor qualified in that area, in a subject or field of major interest.

COURSES IN PSYCHOLOGY

Psychology 201 General Psychology Semester course; 3 lecture hours. 3 credits. • A prerequisite for upper-level work in the field of psychology. A survey of the basic principles, methods of investigation, and fields of study and application.

Psychology 207 Improvement of Reading Efficiency Semester course; 1 lecture and 2 laboratory hours. 2 credits. • A thorough, practical course designed for adults who realize that the ability to read rapidly and comprehend accurately is important for success in many modern occupations. Reading difficulties are diagnosed, and a program developing improved reading habits is outlined for each student for increasing reading speed, improving comprehension, or improving study skills, according to results

of diagnosis. Measurement of gains will be made from time to time during the course.

Psychology 214 Applications of Statistics Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: Statistics 213. • Frequency distributions, measures of central tendency and variability; sampling, probability, correlation, and significance tests as applied to psychological data.

NOTE: Psychology 201 is a prerequisite for the following courses.

Psychology 301 Child Psychology Semester course; 3 lecture hours. 3 credits. • A study is made of the growth and development of the child until puberty. Child-life is viewed in terms of physical, mental, social emotional, and educational factors.

Psychology 302 Psychology of Adolescence Semester course; 3 lecture hours. 3 credits. • A study of mental, moral, social, and physical development from puberty to maturity viewed as in child psychology. Designed for secondary school teachers, youth leaders, and professional psychologists.

Psychology 303 Mental Hygiene Semester course; 3 lecture hours. 3 credits. • A survey of those factors which facilitate the efficient and happy functioning of the individual. Pathological factors will be studied to some extent, in an effort to point ways of avoiding them.

Psychology 304 Developmental Psychology Semester course; 3 lecture hours. 3 credits. • Various empirical and theoretical areas of general psychology considered from a developmental perspective. Topics include: research methods, learning, cognition, intelligence, socialization, personality, cross-cultural studies, phyletic comparisons, effects of early experience, aging; and genetic influences. Consideration is given to all parts of the life cycle.

Psychology 305 Educational Psychology Semester course; 3 lecture hours. 3 credits. • The application of psychological principles to the teaching-learning process, with special emphasis on theories of learning and development.

Psychology 310 Industrial Psychology Semester course; 3 lecture hours. 3 credits. • Application of psychological principles and techniques to problems in personnel management and human engineering; recruitment, selection, training, and placement in industry; criteria in testing and test development; morale evaluation and improvement, employee counseling; worker-management communications; human engineering in equipment design, quality control, working conditions, and safety.

Psychology 317-318 Experimental Psychology Continuous course; 2 lecture and 2 laboratory hours per semester. 3-3 credits. Prerequisite: Psychology 214. • An introduction to experimental procedures and laboratory techniques in psychology; demonstrations and experiments concerning sensation, perception, learning, emotion, and motivation.

Psychology 321 Social Psychology Semester course; 3 lecture hours. 3 credits. • A survey of theories and methods in social psychology, social

influence processes, socialization, attitudes, interpersonal perception, cultural influences in personality, structure and dynamics of small groups, conformity, leadership, and intergroup and international relations.

Psychology 322 Personality and Behavior of the Afro-American Semester course; 3 lecture hours. 3 credits. Prerequisite: Psychology 201. • A study of personality factors such as motivation, ego-functioning, and the socialization processes, with special emphasis on living conditions of Afro-Americans. (Same as Afro-American Studies 322.)

Psychology 324 Psychology of Advertising Semester course; 3 lecture hours. 3 credits. • Psychological factors involved in determining attention, attitudes, and suggestibility as related to consumer preferences and purchasing habits; the role of advertising in influencing consumer behavior.

Psychology 401 Physiological Psychology Semester course; 3 lecture hours. 3 credits. • Data from the fields of anatomy and physiology are presented, and their implications for psychology are discussed. The central nervous system; internal environment; vision; audition; reflexes; emotion; learning; behavior disorders; and their physiological components. Behavior of human organism is studied from the psycho-physiological point of view.

Psychology 403 Introduction to Psycholinguistics Semester course; 3 lecture hours. 3 credits. • Methodology and theory in studying human language behavior are introduced. Topics include the structure of communication using language, language acquisition, and the role of language in thinking and remembering. The relation of language to other ways of communicating is discussed.

Psychology 406 Perception Semester course; 3 lecture hours. 3 credits. • Historical development of perceptual problems in psychology. A survey of early and contemporary major perceptual theories and related research with major emphasis on visual perception.

Psychology 407 Psychology of the Abnormal Semester course; 3 lecture hours. 3 credits. • Development of personality is discussed, with emphasis on factors leading to maladjustment. Lectures and readings cover the symptom groups of emotional disorders of both psychological and organic origin. Methods of assessing and treating these disorders are surveyed.

Psychology 409 Personality Semester course; 3 lecture hours. 3 credits. • The study of the various approaches to understanding human behavior in terms of personality theory. Various theories will be examined for commonality and uniqueness in assumptions, structure dynamics, and development of personality.

Psychology 410 Principles of Learning Semester course; 3 lecture hours. 3 credits. • A course involving principles of learning as they apply to reinforcement, extinction, motivation, emotion, problem-solving, etc., with emphasis on experimental findings. Major theoretical approaches will be examined.

Psychology 411 Survey of Psychological Tests Semester course; 3 lecture hours. 3 credits. Prerequisite: Psychology 214. • Concepts in psychological measurement and a survey of commonly used group tests; testing procedures and rationale underlying these tests; tests of intelligence, aptitude, achievement, interest, and personality critically examined, procedures described for selecting and evaluating specific group tests in these areas.

Psychology 413 Psychology of the Arts and Artists Semester course; 3 lecture hours. 3 credits. • The meaning and function of the arts as a social and psychological phenomena. The personality of the artist and his socio-cultural role. Psychological processes and experiences in producing the works of art. Emphasis on the graphic and plastic arts.

Psychology 415 Animal Behavior Semester course; 3 lecture hours. 3 credits. • Review of methodology and data from ethology and comparative psychology. The course explores the effects of learning, motivation, social and developmental factors on the behavior of organisms ranging from one-celled animals to primates.

Psychology 424 Occupational Information and Career Development Semester course; 3 lecture hours. 3 credits. • Survey of current research. Methods of obtaining occupational information and uses of that information in counseling.

Psychology 425 Field Work Semester course; 1 full day. 3 credits. • The student is placed in an appropriate agency according to his field of interest (personnel, guidance, emotionally disturbed, etc.) where he works one full day a week under agency supervision.

Psychology 427 Psychology of the Handicapped Semester course; 3 lecture hours. 3 credits. • A survey of the handicapped person, with a particular emphasis on the mentally retarded, crippled, cerebral palsied, and hard-of-hearing: extent and nature of the handicap; psychological and emotional aspects; education and treatment and rehabilitation.

Psychology 428 Mental Hygiene in the Classroom Semester course; 3 lecture hours. 3 credits. • An analysis of common problems that occur in the elementary school class with a discussion of current theories of learning and psychoanalytic insights that tend to ameliorate such problems.

Psychology 431 Industrial Safety Semester course; 3 lecture hours. 3 credits. • A comprehensive study of the principles and methods for the control and prevention of accidents adapted to the need of business and industry.

Psychology 440 Principles of Vocational Counseling Semester course; 3 lecture hours. 3 credits. • The nature of the counseling interview. The relationship of aptitudes abilities, interests, personality, and training to vocational behavior. The role of psychometrics in vocational counseling.

Psychology 441 Selection and Classification Semester course; 3 lecture hours. 3 credits. • Study of principles of theory of psychological tests used in industry for selection and classification of personnel. Special emphasis

on relationship between tests and criteria of job success. Other devices used for selection and classification such as interviews and personal history will also be covered.

Psychology 450 Psychology of the Mentally Retarded Semester course; 3 lecture hours. 3 credits. • An analysis of the mentally retarded with special emphasis on the causes of retardation, psychological evaluation, diagnosis and classification as well as training, education and counseling with retardates. Also included are the problems of institutionalization and the training of workers in the field.

Psychology 451 History and Systems of Psychology Semester course; 3 lecture hours. 3 credits. • The history of psychological ideas and theories emphasizing the origins and interrelationships of the major viewpoints and systems from ancient Greece to the present.

Psychology 453-454 Behavior Technology Continuous course; 2 lecture hours and 6 practicum hours. 3 credits per semester. Prerequisite: Psychology 214 or consent of instructor. • The first semester is a survey of approaches to the observation of human behavior and provides 6 hours per week of experience in coding observations in a variety of community treatment settings. The second semester is a survey of behavioral techniques. In addition the student is placed in a community treatment setting for 6 hours per week to serve as a behavioral treatment aide.

Psychology 497 Independent Study Semester course; Variable credit, 1, 2, or 3 credits per semester, maximum total for all independent study courses 6 credits. Open generally only to students of junior or senior standing who have acquired at least 12 credits in the departmental discipline. Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course. • Individual research or readings project under supervision of staff member with oral comprehensive at end of semester.

COURSES IN RELIGIOUS STUDIES

Religious Studies 101 Introduction to Religious Studies Semester course; 3 lecture hours. 3 credits. • An introduction to various methodologies for the study of religion and to recurring issues and problems involved in religious life and thought.

Religious Studies 211 Christian Ethics Semester course; 3 lecture hours. 3 credits. • A historical and systematic consideration of ethical norms and their application to current problems.

Religious Studies 301 Introduction to the Old Testament Semester course; 3 lecture hours. 3 credits. • A survey of the Old Testament from its beginning through the post-Exile period. Emphasis given to the literary and historical development of the text.

Religious Studies 302 Introduction to the New Testament Semester course; 3 lecture hours. 3 credits. Prerequisite: consent of instructor. •

A survey of the New Testament with particular emphasis given to the historical development of the Canon.

Religious Studies 303 Intertestamental Literature and Thought Semester course; 3 lecture hours. 3 credits. Prerequisite: either Religious Studies 301 or 302. • The period between the Old and New Testaments as seen through the literature of the era, with emphasis on the writings of the Apocrypha, Pseudepigrapha, and Josephus.

Religious Studies 304 Historical Development of Judaic Thought Semester course; 3 lecture hours. 3 credits. Prerequisite: Religious Studies 301. • A general survey of the dynamics and characteristic patterns of Judaic thought from earliest times to the present.

Religious Studies 305 Hebrew Prophets Semester course; 3 lecture hours. 3 credits. Prerequisite: Religious Studies 301. • A survey of the literature and history of Israel as seen through the work of the writing prophets. Emphasis will be placed on the second part of the Hebrew canon and the Book of Daniel.

Religious Studies 313 Life and Literature of Paul Semester course; 3 lecture hours. 3 credits. Prerequisite: Religious Studies 302. • A survey of the life and literature of Paul as given in Acts and the Epistles, involving special consideration of Paul's contribution to the expansion of Christianity.

Religious Studies 315 Israel and the Ancient Near East Semester course; 3 lecture hours. 3 credits. Prerequisite: Religious Studies 301. • A comparative study of ancient Near Eastern political histories, cultures, and religions, with respect to their influence in Israelite customs and society. The latest archaeological and inscriptional evidence will be reviewed.

Religious Studies 321 Dead Sea Scrolls Semester course; 3 lecture hours. 3 credits. Prerequisite: Religious Studies 301. • A survey of the major manuscript discoveries from Qumran near the Dead Sea, some of the theories concerning them, and an examination of their significance for biblical scholarship.

Religious Studies 331, 332 Christianity and Culture Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: six hours of religious studies and/or consent of instructor. • A study of the interaction of Christianity and Western culture.

Religious Studies 334 Religion in Contemporary America Semester course; 3 lecture hours. 3 credits. • Religious phenomena in *American life* and thought ranging from denominationalism to the Jesus Movement.

Religious Studies 361 The Bible as Literature Semester course; 3 lecture hours. 3 credits. • Literary aspects of the Bible will be considered. Also attention will be given to the history of the English Bible. (Same as English 361.)

Religious Studies 401, 402 Religions of the World Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: consent of instructor. • An in-

vestigation of the historical, cultural, and theological foundations and development of Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, Shintoism, Zoroastrianism, Islam, Judaism, Christianity, and some modern attempts at syncretism.

Religious Studies 403 History of Western Religion Semester course; 3 lecture hours. 3 credits. • A study of the development of religious thought and action in Western culture, including the Medieval, Reformation, Counter-Reformation, and Modern periods.

Religious Studies 405 Contemporary Problems in Christian Thinking Semester course; 3 lecture hours. 3 credits. Prerequisite: consent of instructor. • Problems to be treated include the Christian understanding of history, the current ecumenical movement within the church, reinterpretation of traditional doctrines, and changes in ethical thinking and social involvement.

Religious Studies 406 Islam Semester course; 3 lecture hours. 3 credits. Prerequisite: Religious Studies 402. • A study of the antecedents, historical advent, and contemporary structure of the Islamic religion.

Religious Studies 408 Indian Tradition Semester course; 3 lecture hours. 3 credits. Prerequisite: Philosophy 202 or Religious Studies 401. • A systematic analysis of the major theories of Indian religious and philosophical thought: Vedas, Upanishads, Gita, Charvaka, Jainism, Buddhism, the six systems of Hinduism, and contemporary developments. (Same as Philosophy 408.)

Religious Studies 410 Chinese and Japanese Traditions Semester course; 3 lecture hours. 3 credits. Prerequisite: Philosophy 201 or Religious Studies 401. • A systematic analysis of dominant religious and philosophical theories in the tradition of China and Japan: Confucianism, Taoism, Chinese Buddhism, neo-Confucianism, Shinto, Japanese Buddhism and contemporary developments. (Same as Philosophy 410.)

Religious Studies 495 Topics in Religious Studies Semester course. 3 lecture hours. 3 credits. Maximum total 6 credits in all topics courses. Prerequisite: written consent of instructor. • An in-depth study of selected ideas or concepts, religious thinkers, or significant movements in the field of religion. See schedule of classes for specific topic to be offered each semester.

COURSES IN RUSSIAN

Russian 101-102 Elementary Russian Continuous course; 3 lecture and 2 laboratory hours. 4-4 credits. • Elementary grammar, reading, and oral drill.

Russian 201-202 Intermediate Russian Continuous course; 3 lecture hours; 3-3 credits. • Rapid review of the essentials of grammar; conversation, readings in Russian literature.

Russian 301, 302 Survey of Literature Semester course; 3 lecture hours. 3, 3 credits. Conducted in Russian. Prerequisite: Russian 201-202 or the

equivalent. • First semester: nineteenth century; Pushkin, Gogol, Turgenev. Second semester: late nineteenth and twentieth centuries. Tolstoy, Dostoyevski, Chekhov, and some modern Soviet writers.

COURSES IN SOCIOLOGY

Sociology 101 General Sociology Semester course; 3 lecture hours. 3 credits. • An introduction to the study of human society. The basic concepts of society and culture and their relationships to each other are studied and then used to analyze the major social institutions.

Sociology 102 Social Problems in the United States Semester course; 3 lecture hours. 3 credits. • A sociological approach to selected contemporary social problems through use of such analytical concepts as role, social class, and subculture.

Sociology 105 Sociology of Racism Semester course; 3 lecture hours. 3 credits. • The course will explore the direct and indirect ways in which racial attitudes are acquired, their effect on individuals and society, and the institutional and ideological manifestations of racism as a "faith system," as exploitation, and as a form of human conflict. The central focus of interest will be on black-white relationships. (Same as Afro-American Studies 105.)

Sociology 200 The Community Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • A comparative analysis of communities from different parts of the world.

Sociology 210 Collective Behavior Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • An analysis of non-institutional forms of behavior, including mobs, riots, and social movements.

Sociology 214 Applications of Statistics Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: Statistics 213. • The application of descriptive and inferential statistics for the social sciences.

Sociology 304 Sociology of the Family Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • The family in selected cultures; analysis of socialization and the parent-child relationship, courtship and marriage, family crises and problems, and the influence of social change on the family.

Sociology 305 Sociology of the Black Family Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101 or permission of instructor. • A socio-history of the development of the dynamics of the black family. (Same as Afro-American Studies 305.)

Sociology 315 Sociology of Education Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • Analysis of education as a social institution in the societal context. Cross-cultural comparative perspectives on education.

Sociology 318 Social Thought Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • A review of the ideas of major

social philosophers whose works are now the foundation of much modern sociology.

Sociology 320 Research Methods in the Social Sciences Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: Sociology 214. • Current methods of research in sociology.

Sociology 321 Social Stratification Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • Analysis of social mobility, class, status, and power.

Sociology 322 Minority Groups in the United States Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • A study of the various racial, religious, and ethnic minority groups. Accommodation and assimilation. Relation of subcultures to the dominant culture.

Sociology 327 Urban Sociology Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • Origin, character, and significance of urban communities. Ecological and social factors are analyzed as well as changes in urban social organization and their consequences.

Sociology 331 Juvenile Delinquency Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • Analysis of the biological, cultural, psychological, and social factors involved in juvenile delinquency and their relation to current techniques of treatment, prevention, and control.

Sociology 333 Sex Roles Semester course; 3 lecture hours; 3 credits. Prerequisite: Sociology 101 or permission of instructor. • A cross-cultural and evolutionary exploration of the interdependence between male and female roles in the following social institutions: family, law, economics, politics, religion, education, and health.

Sociology 340 Social Psychology Semester course; 3 lecture hours. 3 credits. • Focused discussion of the regularities in human behavior that arise due to man's participation in social groups. Emphasis will be placed on such topics as communications, attitudes, language, interpersonal perception, personal identities, and social interaction.

Sociology 341 The Sociology of Small Groups 3 lecture hours; 3 credits. Prerequisite: Sociology 101. • Small groups in relation to the larger society and as subcultures in themselves; structure, attraction, conformity, motivation, power, dynamics, and influence in small groups.

Sociology 352 Social and Cultural Change Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • An analysis of the process of social and cultural factors in relationship to specific reform, revolutionary, and expressive social movements.

Sociology 402 Sociological Theory Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • A study of the works of the major sociological theorists of the 20th century.

Sociology 403 Criminology Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • Analysis of the nature, extent, and distribu-

tion of crime emphasizing theories of and research on causation, prediction, and prevention.

Sociology 426 Population Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • The study of trends in fertility, mortality, population growth, distribution, migration, and composition. The mutual influences of these factors and social organization.

Sociology 428 Comparative Urban Systems Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • Typologies of cities. Cross-cultural comparisons of social institutions in specifically urban forms and context, cross-cultural views, and experience of major urban problems.

Sociology 430 Political Sociology Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • Sociological analysis of political organization and behavior. Such subjects as distribution and uses of power, creation and management of group conflict, development and diffusion of political ideologies, and problems of bureaucracy and mass society will be considered.

Sociology 436 Industrial Sociology Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • The study of industrial plants and business organization as social systems.

Sociology 445 Medical Sociology Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • A survey of the social, economic, cultural, and social psychological factors in health and illness; the sociology of health and medical care organizations and settings; the sociology of health occupations; and the techniques of research in medical sociology.

Sociology 446 Sociology of Mental Health and Illness 3 lecture hours 3 credits. Prerequisite: Sociology 101. • A survey of selected social, economic, cultural, and social psychological factors in mental health and illness. Such problems as defining mental illness; social factors in the distribution, diagnosis, etiology, and treatment of mental disorders; mental illness as a social role; and research methods used in the sociology of mental illness will be considered.

Sociology 448 Drug Dependence: Sociological and Pharmacological Aspects Semester courses. 3 lecture hours. 3 credits. Prerequisite: Sociology 101 or Pharmacology 300 or permission of instructor. • This course will treat the behavioral pharmacological effects of drugs and the impact of drugs and drug users on societies from a sociological point of view. Interdisciplinary in nature, the course will involve primarily the Departments of Pharmacology and Sociology/Anthropology.

Sociology 475 Organizations and Human Behavior Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • A survey of theory and research in social organizations, including the study of behavior in modern complex human organizations.

Sociology 476 Occupations and Professions Semester course; 3 lecture hours. 3 credits. Prerequisite: Sociology 101. • An examination of the social significance of occupations and professions, of forces changing the

contemporary occupational structure, and of factors associated with typical career patterns.

Sociology 495 Topics in Sociology Semester course; 3 lecture hours. 3 credits. Maximum 6 credits per semester, maximum total of 18 credits in all departmental topics courses which may be applied to the major. • A discussion of specialized areas of sociological interest. See schedule of classes for specific topics to be offered each semester. Check with department for specific prerequisites.

Sociology 497 Independent Study Semester course; variable credit. maximum 6 credits per semester; maximum total for all independent study courses 12 credits. Open generally only to students of junior or senior standing who have acquired at least 12 credits in the departmental discipline. Determination of the amount of credit and permission of the instructor and department chairman must be procured prior to registration for the course. Cannot be used in place of existing courses.

COURSES IN SPANISH

Spanish 101-102 Elementary Spanish Continuous course; 3 lecture and 2 laboratory hours. 4-4 credits. • Elementary grammar, reading, and oral drill.

Spanish 151-152 Spanish for Business Majors Continuous course; 3 lecture hours. 3-3 credits. • A study of business Spanish. (Completion of this course does not qualify a student to take intermediate language without passing the language placement test.)

Spanish 201-202 Intermediate Spanish Continuous course; 3 lecture and 1 laboratory hours. 3-3 credits. • Rapid review of the essentials of grammar, conversation, readings in Spanish literature.

Spanish 301, 302 Survey of Literature Semester courses; 3 lecture hours. 3, 3 credits. Conducted in Spanish. Prerequisite: Spanish 201-202. • A survey of Spanish literature up to the present.

Spanish 303, 304 Advanced Grammar and Translation Semester courses; 3 lecture hours. 3, 3 credits. Prerequisite: Spanish 201-202 or the equivalent. • A systematic review of Spanish grammar with emphasis on the elements of style and vocabulary building; translation of English stylistics.

Spanish 305 Conversation and Civilization Semester course; 3 lecture hours. 3 credits. Prerequisite: Spanish 201-202 or the equivalent. • Practice in the spoken language with emphasis on discussions dealing with Spanish and Latin-American civilization. Taught in Spanish.

Spanish 306 Spanish Linguistics Semester course; 3 lecture hours. 3 credits. Prerequisite: Spanish 201-202. • A study of Spanish phonetics with oral practice in pronunciation; an introduction to the history of the Spanish language, and a review of linguistic problems encountered in the teaching of Spanish.

Spanish 321, 322 Survey of the Literature of Spanish America Semester course; 3 lecture hours. 3, 3 credits. Prerequisite: Spanish 201, 202. • An introduction to major authors and trends. First semester: from discovery to independence. Second semester: from independence to the present. Taught in Spanish.

NOTE: Spanish 301, 302 or 303, 304 are prerequisite to all the following courses.

Spanish 411 The Middle Ages Semester course; 3 lecture hours. 3 credits. Prerequisites: Spanish 301, 302. • Reading and discussion of such representative works as the following: *El Poema de Mio Cid* (anonymous); selections from the lyric poetry; selections from the works of Gonzalo de Berceo; *El Auto de los Reyes Magos*; *El Libro del Conde Lucanor*, Don Juan Manuel; *El Libro de Buen Amor*, Arcipreste de Hita. Taught in Spanish.

Spanish 413 The Golden Age Semester course; 3 lecture hours. 3 credits. • A reading and discussion of some of the representative works of such authors as Cervantes, Lope de Vega, Tirso de Molina, Calderón, Alarcón, Góngora, and Garcilaso de la Vega. Taught in Spanish.

Spanish 417 Nineteenth-Century Literature Semester course; 3 lecture hours. 3 credits. Prerequisites: Spanish 301, 302. • A reading and discussion of representative works of Valera, Fernán Caballero, Pereda, Galdós, Clarín, Larra, Espronceda, Duque de Rivas, and Pardo Bazán. Taught in Spanish.

Spanish 420 The Twentieth Century Semester course; 3 lecture hours. 3 credits. Prerequisites: Spanish 301, 302. • Reading and discussion of representative works of Gasset, Azorín, Unamuno, Baroja, Valle-Inclán, Pérez de Ayala, García Lorca, Sotela, Ortega, Gironella, Cela, Goytisolo, Laforet, and Matute. Taught in Spanish.

Spanish 425 Spanish-American Literature: Prose, Fiction Semester course; 3 lecture hours. 3 credits. • An in-depth reading and discussion of novels and short stories. Taught in Spanish.

Spanish 426 Spanish-American Literature: Poetry/Drama/Essay Semester course; 3 lecture hours. 3 credits. • An in-depth reading and discussion of outstanding works of each of these three genres. Taught in Spanish.

Spanish 495 Topics in Spanish Semester course; 3 lecture hours, 3 credits. May be repeated for a maximum total of 6 credits. • An in-depth study of selected topics in Spanish. See schedule of classes for specific topic to be offered each semester.

COURSES IN STATISTICS

Statistics 212 Concepts of Statistics Semester course; 3 lecture hours. 3 credits. Prerequisite: Mathematics 211. • An introduction to the nature of statistical thinking and the application of abstract systems to the resolution of non-abstract problems. Probability models for stochastic events.

Parametric representations. Estimation, testing hypotheses and interval estimation with application to classical models. (A core course for mathematical sciences.)

Statistics 213 Introduction to Statistics Semester course; 3 lecture hours. 3 credits. Prerequisites: two years of high school algebra and a satisfactory score on the mathematics placement test. • Elementary probability, organization and analysis of data, combinatorial analysis, binomial distribution, random sampling, testing hypotheses, non-parametric statistics, regression and correlation, analysis of variance. (Not open to students in mathematical sciences.)

Statistics 214 Applications of Statistics Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: Statistics 213. • A study of nature and application of statistical methods including analysis of variance, regression and correlation. Special topics include distribution free methods in various statistical problems.

(Psychology majors see Psychology 214; sociology and anthropology majors see Sociology 214.)

Statistics 313-314 Statistical Methods Continuous course; 2 lecture and 1 laboratory hour. 3-3 credits. Prerequisites: Statistics 212 or Statistics 214 or Psychology 214 or Sociology 214. • An introduction to basic statistical methods, including analysis of variance, regression and correlation. Special topics include distribution free methods in various statistical problems.

Statistics 413-414 Mathematical Statistics Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Mathematics 202. • Probability, discrete and continuous distributions, moment generating functions, limit theorems, estimation, decision theory and testing hypotheses, relationships in a set of random variables, linear models, and design.

See also Mathematics 309 Introduction to Probability Theory
Mathematics 403 Intermediate Probability Theory

PART VIII—SCHOOL OF BUSINESS

J. CURTIS HALL, Dean

JOHN D. LAMBERT, Assistant Dean

ROBERT N. SHEFFIELD, Assistant Dean

The primary objective of the School of Business is to prepare students for professional careers in business, government, research, and education. The general requirements for all students in the school are designed to provide a broad knowledge of life in general and of business in particular. The major requirements provide opportunity for extensive study in specific fields.

Within the primary objective, the School of Business has these goals:

1. To render service to the business community
2. To engage in and encourage research in business-related fields
3. To provide service to other schools in the university
4. To contribute to the identification and solution of problems related to the urban mission of the university

The School of Business offers degree programs in accounting, business administration and management, economics, information systems, marketing, and office administration. It also offers, in cooperation with the School of Education, a degree program in business education.

GENERAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN BUSINESS

A minimum of 126 credits, no more than four of which may be in physical education (activities), is required. The credit requirements for all bachelor of science degree programs in business are to be distributed as follows:

1. General Requirements (51 credits)	Credits
A. Composition and Rhetoric	6
B. Principles of Economics	6
C. Mathematics (Business 101-102 or Mathematics 101 and 204)	6
D. Restricted Electives—A total of 24 credits must be earned from the following four fields. At least three credits must be earned in each field	24
(1) Humanities, selected from the following suggested areas: art (non-studio), Humanities 201, 202, language, literature (including foreign literature in English translation), music (non-studio), philosophy, religious studies	
(2) Human Behavior, selected from the following suggested areas: psychology, sociology, anthropology	
(3) Institutional Studies, selected from the following suggested areas: political science, history, geography	
(4) Natural Science	
E. Non-School of Business Electives	9
2. School of Business Core (36 credits)	
Business 203-204 Introduction to Accounting	6
Business 272 Introduction to Marketing	3
Business 301 Business Statistics	3
Business 311 Financial Management	3
Business 320 Fundamentals of Management	3
Business 323 Legal Environment of Business	3
Business 325 Business Communications	3
Business 330 Behavioral Management	3
Business 360 Information Systems Concepts	3
Business 434 Policy Determination	3
Economics 303 Theory of the Firm	3
3. Major Requirements (27 credits)—See the specific requirements listed under the major requirements section of the particular department	27
4. Electives	12
Total	126

ACCOUNTING

MERVYN W. WINGFIELD, Chairman of the Department

Larry P. Bailey / Edward N. Coffman / Charles E. Edwards

Charles E. Fletcher / B. Roland Freasier, Jr. / H. Wayne Hudgins

Robert J. Marioni / John H. McCray / Henry S. Ramsey
Richard A. Scott / John B. Sperry / William H. Trenchard
Jackie G. Williams / H. David Willis

The accounting major permits students to tailor their educational programs to satisfy differing objectives and career goals. Students may elect to study in one of the five optional fields listed below.

Major Requirements	Credits
Business 303-304. Financial Accounting I and II	6
Business 404. Financial Accounting III	3
Elective Option (Courses taken in one of the following fields: public accounting, tax accounting, managerial accounting, governmental accounting, accounting systems)	18
	<hr/> 27

BUSINESS ADMINISTRATION AND MANAGEMENT

RUSSELL A. JOHNSTON, Chairman of the Department

Moustafa H. Abdelsamad / John A. Bachmann / Sam G. Berry
Johannes J. Bisschop / Richard O. Blalack / James H. Boykin
Darrel R. Brown / Collin Bushway / Ann R. Coates
William H. Daughtrey, Jr. / Herbert J. Davis / Guy J. DeGenaro
James W. Duff, Jr. / David R. Falke / Jerry T. Ferguson
Glenn H. Gilbreath / Jerri D. Gilbreath / Walter S. Griggs, Jr.
Frederick C. Haas / Neil J. Humphreys / Eugene H. Hunt
Wallace R. Johnston / Harold J. Lawlor / Thomas J. Maronick
Elbert G. Miller / R. Clifton Poole / George W. Rimler
Neale M. Robertson / Harvey W. Rubin / Michael A. Spinelli
Jack E. Thornton / Paul M. Umberger / Carl G. K. Weaver
D. Robley Wood, Jr.

The major in business administration and management is designed to provide a broad education in business, management, and administration. In addition to the broad aspects of the program, students elect to study further in optional fields. Election of optional fields should be made by students before the beginning of the second semester of their junior year.

Major Requirements	Credits
Business 333. Risk and Insurance	3
Business 412. Statistical Methods	3
Business 487. Management Decision Methods	3
Business 499. Management Seminar	3
Economics 307. Money and Banking	3
Elective Option (Courses taken in one of the following fields: finance; general business; insurance / financial security; op- erations management; personnel and industrial relations; real estate and urban land development)	12
	<hr/> 27

BUSINESS EDUCATION AND OFFICE ADMINISTRATION

GEORGE J. PETRELLO, Chairman of the Department

Nancy A. Dittman / Owen F. Fields / David E. Gootnick

Laura B. Greer / J. Howard Jackson / Iris W. Johnson

Dorothy E. Lee / J. Kenneth Roach / Woodie L. Tucker / Jane D. Williams

The programs in business education are designed for young men and women who desire careers in teaching business subjects on the junior high school, the senior high school, or the college level.

The four-year program in business education includes 48 semester credits of general education required of all teachers certified by the Commonwealth of Virginia. See the requirements from the School of Education for a listing of these credits.

In addition to the bachelor of science degree program in business education, the department offers the bachelor of science program in office administration as well as associate degree programs in general secretarial, legal secretarial, and medical secretarial.

Endorsements to teach may be earned in selected areas of business education by completing 45 semester hours as follows:

Area A: General Office Procedures	45 credits
(Endorsed to teach basic business, bookkeeping, office procedures, and typewriting.)	
Area B: Stenography	45 credits
(Endorsed to teach basic business, office procedures, recordkeeping, shorthand, and typewriting.)	
Area C: Bookkeeping-Data Processing	45 credits
(Endorsed to teach basic business, bookkeeping and accounting, data processing, and office procedures.)	

Separate Subject Endorsement: Endorsement in specific subject areas may be earned by completing the number of credits indicated:

Basic Business	12 credits
Bookkeeping and Accounting	12 credits
Data Processing	12 credits
Shorthand (9 hours) and Typewriting (6 hours)	15 credits ¹
Office Systems and Procedures	12 credits

Candidates who wish to be endorsed in a limited area may substitute approved electives to complete the degree program.

State scholarships are available for those who will teach at least one year in the public schools of Virginia.

¹ Requirement may be reduced if the student is exempted from one or more courses by virtue of prior training.

Curriculum in Business Education**Area A: General Office Procedures**

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
Biology 101-102. General Biology (or other laboratory science) and Biology L101-L102	4	4
Business 101-102. Decision Mathematics	3	3
Business 121. The Business Environment	3	—
Business 145. Beginning Typewriting ²	—	3
English 101-102. Composition and Rhetoric	3	3
History 201, 202. American History	3	3
Physical Education	1	—
	17	16
<i>Second Year</i>		
Business 203-204. Introduction to Accounting	3	3
Business 245. Intermediate Typewriting	3	—
Business 320. Fundamentals of Management	3	—
Business 345. Advanced Typewriting	—	3
Business 360. Information Systems Concepts	—	3
Economics 201-202. Principles of Economics	3	3
English 201, 202. Western World Literature	3	3
Approved Elective	—	3
	15	18
<i>Third Year</i>		
Accounting Elective	3	3
Business 323-324. Legal Environment of Business	3	3
Business 343. Office Machines	3	—
Business 349. Office Procedures	—	3
Business 353. Introduction to Business Teaching	3	—
Business 453. Teaching Bookkeeping and Basic Business	3	—
Psychology 201. General Psychology	—	3
Approved Elective	—	3
	15	15
<i>Fourth Year</i>		
	A	B
Business 325. Business Communications	3	—
Business 438. Office Management	3	—
Education 486. Supervised Teaching—Secondary ³	—	6
Health Education 385. School and Community Hygiene	—	3
Psychology 305. Educational Psychology	—	3
Speech 408. Speech for Teachers	3	—
Approved Electives	6	3
	15	15

² Required only of those who fail to pass the typewriting placement test.³ Education 486 may be taken during the first eight weeks (Column "A") of either semester of the final year.

Curriculum in Business Education**Area B: Stenography**

	Credits	
	1st Sem.	2nd Sem.
<i>First Year (Same as Area A on page 218)</i>		
<i>Second Year</i>		
Business 203-204. Introduction to Accounting	3	3
Business 241-242. Beginning and Intermediate Shorthand	3	3
Business 245. Intermediate Typewriting	3	—
Business 345. Advanced Typewriting	—	3
Economics 201-202. Principles of Economics	3	3
English 201, 202. Western World Literature	3	3
Approved Elective	—	3
	15	18

Third Year

Business 320. Fundamentals of Management	3	—
Business 323-324. Legal Environment of Business	3	3
Business 341. Advanced Shorthand and Transcription ..	3	—
Business 343. Office Machines	—	3
Business 349. Office Procedures	3	—
Business 353. Introduction to Business Teaching	3	—
Business 360. Information Systems Concepts	—	3
Business 455. Teaching Secretarial Subjects	—	3
Psychology 201. General Psychology	—	3
	15	15

Fourth Year

		A	B
Business 325. Business Communications	3	—	—
Education 486. Supervised Teaching—Secondary ⁴	—	6	—
Health Education 385. School and Community Hygiene .	—	—	3
Psychology 305. Educational Psychology	—	—	3
Speech 408. Speech for Teachers	3	—	—
Approved Electives	9	—	3
	15	15	

Curriculum in Business Education**Area C: Bookkeeping and Data Processing**

	Credits	
	1st Sem.	2nd Sem.
<i>First Year (Same as Area A on page 218)</i>		
Business 203-204. Introduction to Accounting	3	3
Business 320. Fundamentals of Management	3	—
Business 360. Information Systems Concepts	—	3
Economics 201-202. Principles of Economics	3	3
English 201, 202. Western World Literature	3	3
Electives	3	3
	15	15

⁴ Education 486 may be taken during the first eight weeks (Column "A") of either semester of the final year.

	Credits	
	1st Sem.	2nd Sem.
<i>Third Year</i>		
Business 301. Business Statistics	3	—
Accounting Elective	3	3
Business 323-324. Legal Environment of Business	3	3
Business 343. Office Machines	—	3
Business 353. Introduction to Business Teaching	3	—
Business 453. Teaching Bookkeeping and Basic Business	—	3
Business 460. Data Processing Systems and Methods ..	3	—
Business 461. Unit Record Equipment	—	3
Psychology 201. General Psychology	—	3
	15	18
<i>Fourth Year</i>		
	A	B
Business 325. Business Communications	3	—
Business 438. Office Management	3	—
Business 467. COBOL Programming	3	—
Education 486. Supervised Teaching—Secondary ⁵	—	6
Health Education 385. School and Community Hygiene ..	—	3
Psychology 305. Educational Psychology	—	3
Speech 408. Speech for Teachers	—	3
Approved Electives	6	—
	15	15

Curriculum in Office Administration—MAJOR REQUIREMENTS

In planning the curricula in office administration, recognition has been given to the fact that secretaries need a broad background in business that encompasses more than shorthand and typewriting skills. In the programs offered in this department, provision is made for students to prepare for the professional positions held by top-level secretaries. The courses offered form a foundation for those who, after the requisite experience, plan to take the Certified Professional Secretary Examination. The following courses, in addition to those prescribed on page 215, constitute the major requirements for the office administration program leading to the bachelor of science degree.

	Credits
Business 145-245. Beginning and Intermediate Typewriting	6
Business 241-242. Beginning and Intermediate Shorthand	6
Business 341. Advanced Shorthand	3
Business 343. Office Machines	3
Business 345. Advanced Typewriting	3
Business 349. Office Procedures	3
Business 438. Office Management	3

⁵ Education 486 may be taken during the first eight weeks (Column "A") of either semester of the final year.

Curriculum in General Secretarial—DEGREE REQUIREMENTS

This two-year program, leading to an associate in science degree, is designed to prepare students for secretarial positions in business:

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
Business 101. Decision Mathematics	3	—
Business 121. The Business Environment	3	—
Business 145-245. Beginning and Intermediate Type-writing ⁶	3	3
Business 203. Introduction to Accounting	—	3
Business 241-242. Beginning and Intermediate Shorthand ⁶	3	3
English 101-102. Composition and Literature	3	3
Speech 121. Effective Speech	—	3
	<hr/> 15	<hr/> 15
<i>Second Year</i>		
Business 323. Legal Environment of Business	3	—
Business 325. Business Communications	—	3
Business 341. Advanced Shorthand	—	3
Business 343. Office Machines	3	—
Business 345. Advanced Typewriting	3	—
Business 349. Office Procedures	—	3
Economics 201-202. Principles of Economics	3	3
Psychology 201. General Psychology	3	—
Elective	—	3
	<hr/> 15	<hr/> 15

Curriculum in Legal Secretarial—DEGREE REQUIREMENTS

This two-year program, leading to an associate in science degree, is designed to prepare students for secretarial positions in law offices, both public and private.

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
Business 101. Decision Mathematics	3	—
Business 121. The Business Environment	3	—
Business 145-245. Beginning and Intermediate Typewriting ⁷	3	3
Business 203. Introduction to Accounting	—	3
Business 241-242. Beginning and Intermediate Shorthand ⁷	3	3
English 101-102. Composition and Literature	3	3
Psychology 201. General Psychology	—	3
	<hr/> 15	<hr/> 15

⁶ If a student is exempt basic typewriting and shorthand courses because of prior training, he should select from the following electives: Business 102, 204, 272, 320, 324, and 438.

⁷ If a student is exempt from basic typewriting and shorthand courses because of prior training, he should select from the following electives: Business 102, 204, 438 or Speech 121.

	Credits	
	1st Sem.	2nd Sem.
<i>Second Year</i>		
Business 323-324. Legal Environment of Business	3	3
Business 325. Business Communications	3	—
Business 341. Advanced Shorthand	3	—
Business 343. Office Machines	—	3
Business 345. Advanced Typewriting	3	—
Business 346. Legal Dictation	—	3
Business 349. Office Procedures	—	3
Economics 201-202. Principles of Economics	3	3
	<hr/> 15	<hr/> 15

Curriculum in Medical Secretarial—DEGREE REQUIREMENTS

This two-year program, leading to an associate in science degree, is designed to prepare students for work as assistants or secretaries in doctors' offices, hospitals, and other medical institutions.

	Credits	
	1st Sem.	2nd Sem.
<i>First Year</i>		
Business 101. Decision Mathematics	3	—
Business 121. The Business Environment	—	3
Business 242-341. Intermediate and Advanced Shorthand*	3	3
Business 245-345. Intermediate and Advanced Typewriting*	3	3
Biology 103-104. Anatomy and Physiology	3	3
English 101-102. Composition and Literature	3	3
	<hr/> 15	<hr/> 15

<i>Second Year</i>		
Business 203. Introduction to Accounting	3	—
Business 323. Legal Environment of Business	3	—
Business 325. Business Communications	—	3
Business 347. Medical Dictation and Procedures	3	—
Business 349. Office Procedures	—	3
Chemistry 105. Survey of Chemistry	—	4
Economics 201-202. Principles of Economics	3	3
Psychology 201. General Psychology	3	—
Business 343. Office Machines	—	3
	<hr/> 15	<hr/> 16

* A student who enters without qualifying for Business 245, Intermediate Typewriting, and Business 242, Intermediate Shorthand, may complete this program by attending an additional semester or a summer session.

ECONOMICS

WILLIAM F. HELLMUTH, Chairman of the Department

Larry G. Beall / Robert T. Cone / Clinton S. Ferguson
 Charles J. Gallagher / William B. Harrison, III / Harmon H. Haymes
 George E. Hoffer / George W. Jennings / Max Moszer
 Dennis M. O'Toole / Peter P. Pogány / Anirejuoritse Sagay
 Abdelaleem M. Sharshar / Alain H. Sheer / Eleanor C. Snellings
 John M. Virgo

The program leading to the B.S. degree in economics offers an introduction to the fundamentals of business and economics, with a concentration in the third and fourth years on methods of economic analysis. The curriculum prepares students for positions in business and government and for graduate study. The department also offers courses in economics to meet the needs of students in other curricula offered by the university.

Major Requirements

	<i>Credits</i>
Economics 301. Microeconomic Theory	3
Economics 307. Money and Banking	3
Economics 407. Macroeconomic Theory	3
Economics 499. Senior Seminar in Economics	3
Economics Electives	12
Business 412. Statistical Methods	3
	<hr/> 27

INFORMATION SYSTEMS

A. LEE HALL, Chairman of the Department

H. Leon Adkison / Edwin E. Blanks / Harrison S. Carter
 Robert L. Causey / Robert P. DuVernay / Joyce T. Forrest
 George F. Kotlan / Edward L. Meharg / Lois E. Parker
 Raymond V. van Wolkenten, Jr. / Robert R. Westerman

This program, leading to an associate in science degree, consists of a sequence of courses designed to prepare students for positions in data processing installations. Persons desiring admission to this program must make a satisfactory score on the Programmer's Aptitude Test (PAT).

Curriculum in Information Systems—DEGREE REQUIREMENTS

<i>First Year</i>	<i>Credits</i>	
	<i>1st Sem.</i>	<i>2nd Sem.</i>
Business 101-102. Decision Mathematics	3	3
Business 161-162. Functional Wiring Principles	3	3
Business 163-164. Computer Programming	3	3
Business 203-204. Introduction to Accounting	3	3
English 101-102. Composition and Literature	3	3
	<hr/> 15	<hr/> 15

Second Year	Credits	
	1st Sem.	2nd Sem.
Business 121. The Business Environment	3	—
Business 261-262. Business Systems Analysis and Design	3	3
Business 263-264. Advanced Computer Programming ..	3	3
Business 266. Data Processing Field Project	—	3
Business 268. Data Processing Installation Supervision ..	—	3
Business 301. Business Statistics	—	3
Business 325. Business Communications	3	—
History, Political Science, or Economics	3	—
	<hr/> 15	<hr/> 15

MARKETING

LEONARD L. BERRY, Chairman of the Department

Donald H. Bowles / Jane S. Cromartie / Bob R. Ferguson
 William R. George / James S. Hensel / J. Patrick Kelly
 Kenneth E. Maricle / Paul J. Solomon

The major in marketing is designed to give the student a broad working knowledge of contemporary marketing philosophy and practice. Students working closely with their advisors will be able to choose from a number of available marketing courses those that most closely meet their interests and career aspirations. Graduates of this program will find career opportunities in such fields as marketing management, advertising, sales, marketing research, public relations, retailing, and management of non-business organizations.

Major Requirements

	Credits
Business 273. Marketing in the Changing World	3
Marketing Strand Electives	18
Business 476. Marketing Management	3
Business 477. Topic Seminar in Marketing or	
Business 478. Honors Course in Marketing or	
Business 479. Marketing Internship	3
	<hr/> 27

RETAILING

ALVIN K. WELZEL, Acting Chairman of the Department

M. Dean Dowdy / Kathryn M. McGeary

Entering freshmen who are interested in retailing should consider the marketing program offered by the School of Business.

PROGRAM IN HEALTH CARE MANAGEMENT

The School of Business cooperates with the School of Allied Health Professions in offering the program leading to the degree of bachelor of

science in health care management. The program goal centers on the preparation of administrators for geriatric care and other rehabilitative facilities. Interested students must apply to the School of Allied Health Professions for admission prior to the beginning of the junior year. School of Business students preparing to apply for admission to the program are advised to follow the course requirements suggested in the freshman and sophomore years of other business programs. Inquiries about the program may be addressed to Dr. M. Leigh Rooke, Program Director, Health Care Management, School of Allied Health Professions, on the MCV Campus.

GRADUATE PROGRAMS IN BUSINESS AND ECONOMICS

RICHARD T. HISE, Director

The School of Business offers graduate work leading to the degrees of master of business administration, master of science in business, and master of arts in economics. The programs are designed to prepare candidates for responsible participation in business, industry, government, and education. Details of the program are given in a separate graduate bulletin which will be sent upon request. Write to the Director of Graduate Studies, School of Business, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284.

PREPARATION FOR THE STUDY OF LAW

WALTER S. GRIGGS, JR., Department of Business Administration and Management, Advisor

DENNIS W. JOHNSON, Department of Political Science, Advisor

Few law schools list specific undergraduate courses as prerequisites for admissions. Thus the student who is considering law school education may major in virtually any department in the School of Arts and Sciences, the School of Business, or the School of Community Services. Students, however, are encouraged to obtain a broad liberal arts background with emphasis on the social sciences and English.

The pre-law school advisors maintain continual contact with law school admissions offices and will assist any interested student with questions concerning curriculum, financial assistance, application procedure or the law school admissions test.

COMPUTER CENTER

The University Computer Center has an IBM 370/145 Computer System with 1,024 Bytes (1K = 1,024) which runs under release 1.0 of the VS2 operating system with the HASP — IV modification. Peripheral equipment includes disk drives, tape drives, line printer, and a card reader/punch. The programming languages available with this system consist of Assembler, COBOL, Fortran, PL1, and RPG. The statistical packages available to both students and faculty are Biomedical Computer Programs

(BMD), Statistical Analysis System (SAS), and Statistical Package for the Social Sciences (SPSS) Terminals are strategically located on both campuses.

MANAGEMENT CENTER

RAY M. AYRES, Director

E. Cofer Loomer / Virgil C. Mansfield / Clyde M. Thompson

The Management Center exists for the purpose of providing non-credit educational programs for business, industry groups, trade and professional associations, and various governmental agencies. These programs may represent the total training effort of an entity or may be used to supplement an existing program. They may be designed as short courses, seminars, conferences, or workshops. They may be conducted on or off campus.

The Management Center strives to:

1. Provide educational programs designed to develop personnel for executive positions
2. Offer a broad spectrum of programs including:
 - a. Executive development
 - b. Middle-management improvement
 - c. First-level supervision
 - d. Supervisory development
3. Present programs that explore the most advanced academic and professional thinking in various phases of business
4. Engage in experimental studies to develop criteria needed to improve educational programs for business and industry
5. Encourage and expand university interdisciplinary offerings for business, industry, and the community

The Management Center staff of experienced program planners is available to all groups. In addition to initiating short-term educational programs of its own design, the center serves as a liaison between the academic resources of the university and outside groups or organizations.

The Management Center, in addition to other continuing educational activities, develops and conducts certificate courses in management, supervision, and general development that meet one night each week on campus. Typical courses include:

- | | |
|-------------------------------------|---|
| • Management Principles | • Reading Improvement Workshop |
| • Supervisory Training | • Labor Relations Practice |
| • Leadership and Human Relations | • Medical Terminology |
| • Building Effective Communications | • Data Processing Techniques |
| • Engineering Quality Control | • Industrial Purchasing and Contracting |

Continuing Education Units (CEU) is a new nationwide system to provide a uniform measure of attainment in non-credit educational programs. Individuals who satisfactorily complete courses of 10 or more contact hours may earn Continuing Education Units. A permanent record of the individual's Continuing Education Unit attainments will be kept by awarding institutions. Virginia Commonwealth University and the Management Center are participating in this system and will award Continuing Education Units. Individuals, business and professional organizations may use compilations of Continuing Education Units to provide measures of non-credit educational achievements.

COURSES IN BUSINESS

Business 101-102. Decision Mathematics Continuous course; 3 lecture hours. 3-3 credits. • Provides the mathematical background necessary for the modern businessman to understand the quantitative methods of problem solving. First semester topics include algebra, logarithms, compound interest, and linear mathematics with special emphasis on linear programming. Second semester covers matrix algebra, elemental calculus, and basic probability concepts.

Business 121 The Business Environment Both semesters; 3 lecture hours. 3 credits. • Concepts and issues in contemporary business.

Business 145 Beginning Typewriting Both semesters; 3 lecture hours. 3 credits. • Includes the development of skill in typing letters, manuscripts, and simple statistical work. May not be taken for credit by persons who have received credit for as much as two semesters of prior instruction in typewriting at any level, except with permission of the department chairman.

Business 161-162 Functional Wiring Principles Continuous course; 3 lecture hours. 3-3 credits. • This course is designed to provide a foundation for detailed study in the major areas of data processing. The card punch, sorter, reproducing punch, and tabulator will be discussed with emphasis on their use in accounting and record keeping. Laboratory exercises involving planning and wiring a range of unit record equipment will be completed.

Business 163-164 Computer Programming Continuous course; 3 lecture hours. 3-3 credits. • The basic concepts of digital computers will be developed in this course. Topics covered will include central processing unit, storage devices, arithmetic unit, logic ability, block diagramming, and principles of stored programming. Laboratory sessions will be used to solve case problems on basic card systems.

Business 203-204 Introduction to Accounting Continuous course; 3 lecture hours. 3-3 credits. • Theoretical and technical facets of financial and managerial accounting for business. Accumulation, analysis, interpretation, and uses of accounting information.

Business 241-242 Beginning and Intermediate Shorthand Continuous course; 3 lecture and 2 laboratory hours. 3-3 credits. • A course in short-

hand theory and dictation with an introduction to transcription. **Business 241** may not be taken for credit by persons who have received credit for two semesters of prior instruction, and **Business 242** may not be taken for credit by persons who have received credit for four semesters of prior instruction, except with permission of the department chairman.

Business 245 Intermediate Typewriting Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 145. • Includes development of typewriting speed and accuracy and the application of typewriting to business papers. May not be taken for credit by persons who have received credit for as much as four semesters of prior instruction in typewriting at any level, except with permission of the department chairman.

Business 261-262 Business Systems Analysis and Design Continuous course; 3 lecture hours. 3-3 credits. • Designed to guide the student through the three stages in the evolution of a system: (1) analysis of present information flow, (2) system specification and equipment selections, and (3) implementation of the system. The detailed steps of each phase of systems design are shown in relation to the overall study.

Business 263-264 Advanced Computer Programming Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Business 163-164 or permission of instructor. • The principles presented in Business 163-164 are employed in this course. Advanced input-output media and logic decision techniques will be emphasized. Laboratory sessions will be used to solve magnetic tape and random access problems.

Business 266 Data Processing Field Project Second semester; 3 lecture hours. 3 credits. • Primarily designed to give the student an overview of practical data processing. The project will involve the student in a real problem emanating from an actual data processing situation.

Business 268 Data Processing Installation Supervision Second semester; 3 lecture hours. 3 credits. • The student will be given concrete examples of the steps taken in problem definition, problem analysis, solution development, and solution application. Emphasis is placed on management planning in the data processing installation and the methodology of supervision and control.

Business 272 Introduction to Marketing Both semesters; 3 lecture hours. 3 credits. Prerequisite: sophomore standing. • An introduction to the excitement, challenges, failures, opportunities, successes, potential, and nature of marketing.

Business 273 Marketing in the Changing World Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 272. • A study of the uncontrollable forces which shape the markets in which firms operate. Includes consideration of the social, political, legal, technological, and economic environments.

Business 301 Business Statistics Both semesters; 3 lecture hours. 3 credits. Prerequisites: Business 101-102. • Basic methods of collecting and presenting data are introduced. Analysis of data is studied by the calcula-

tion of index numbers, central tendency, and dispersion. Course includes an introduction to sampling and probability.

Business 303-304 Financial Accounting I and II (Intermediate) Continuous course; 3 lecture hours. 3-3 credits. Prerequisite: Business 204. • Theoretical standards and procedures for accumulating and reporting financial information about business. Classification, valuation, and timing involved in determination of income and asset/equity measurement.

Business 311 Financial Management Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 204. • Principles of optimal financial policy in the procurement and management of wealth by profit-seeking enterprises; the application of theory to financial decisions involving cash flow, capital structure, and capital budgeting.

Business 315 Personal Finance Both semesters; 3 lecture hours. 3 credits. • Designed to assist families and individuals in making complex financial decisions. Units include income and expenditure, credit, borrowing, banking, savings, insurance, home buying, investment, and estate planning. May not be taken for degree credit by School of Business majors.

Business 320 Fundamentals of Management Both semesters; 3 lecture hours. 3 credits. • Traditional and modern management principles, techniques and concepts associated with the productivity of organizational resources.

Business 323 Legal Environment of Business Both semesters; 3 lecture hours. 3 credits. • Basic legal concepts applicable to business with emphasis on legal aspects of organizing, operating, and terminating a business. Topics include contracts, employment relationships, sales, bailments, commercial paper, and competitive practices.

Business 324 Legal Aspects of the Management Process Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 323 or permission of the instructor. • Legal aspects of partnerships and corporations; management rights, powers, and responsibilities.

Business 325 Business Communications Both semesters; 3 lecture hours. 3 credits. Prerequisite: English 101-102. • The solution of representative business problems through the writing of letters and reports.

Business 326 Real Estate Law Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 323, equivalent, or permission of instructor. • Provides an understanding of legal fundamentals of the real estate field.

Business 330 Behavioral Management Both semesters; 3 lecture hours. 3 credits. Prerequisite: junior standing. • Examines the influence of job design, leadership style, pay, and the formal and informal organization on productivity and human needs.

Business 331 Personnel Management Both semesters; 3 lecture hours. 3 credits. Prerequisites: Business 330 or permission of the instructor. • Basic problems of employee-management relations; process of employment, selection, and placement; wage levels and methods; job studies and

descriptions; training methods and programs; and employee rating systems.

Business 333 Risk and Insurance Both semesters; 3 lecture hours. 3 credits. • Nature of risk; insurance and other methods of dealing with risk; life and health, and property and liability insurance; insurance as an economic and social institution.

Business 341 Advanced Shorthand and Transcription Both semesters; 3 lecture and 2 laboratory hours. 3 credits. Prerequisites: Business 242 and Business 345 or equivalent. • This course develops dictation speeds from 90 to 120 words a minute and transcription speeds from 20 to 30 words a minute.

Business 343 Office Machines Both semesters; 5 laboratory hours. 3 credits. • Designed to acquaint the student with all types of office machines and their appropriate use in business organizations of different sizes as well as to develop skill in the use of these machines.

Business 345 Advanced Typewriting Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 245 or equivalent. • Students develop maximum typewriting speed and accuracy for sustained periods of time. Advanced typewriting problems and production speed are emphasized.

Business 346 Legal Dictation and Transcription 3 lecture hours. 3 credits. Prerequisite: Business 341. • This course includes the learning of a legal vocabulary and the taking and transcribing of legal dictation. The course is designed for secretarial students who desire specialized training in the legal field.

Business 347 Medical Dictation and Office Procedures 3 lecture hours. 3 credits. Prerequisite: Business 341. • Medical vocabulary, dictation, and office procedures for secretaries.

Business 349 Office Procedures Both semesters; 3 lecture hours. 3 credits. • Designed for secretarial students to provide a knowledge of duties and correct office procedures required by an efficient business organization.

Business 353 Introduction to Business Teaching Both semesters; 3 lecture hours. 3 credits. • Provides a detailed examination of the principles and problems of business education on the secondary level.

Business 360 Information Systems Concepts Both semesters; 3 lecture hours. 3 credits. • Provides a general orientation to the stored program computer and an insight into the broad impact which computers have on the business environment. Several programming languages are discussed and selected elementary business-oriented problems are programmed.

Business 361 Computational Programming Both semesters; 3 lecture hours. 3 credits. • A study of the use of computers to solve quantitative problems. Emphasis is given to a computational programming language with the intent of making the computer a useful tool in the student's major field.

Business 365 Information Systems for Operations Management Both semesters; 3 lecture hours. 3 credits. Prerequisites: Business 102 and Business 360 or permission of instructor. • Designed to develop skills in the formulation of operations management problems for computer solution. Use of pre-written program packages is emphasized.

Business 370 Promotional Strategy Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 272. • Focuses on the behavioral science approach to personal and non-personal communication. The concept of the promotion mix and its role in the marketing mix is stressed.

Business 371 Elements in Advertising Strategy Second semester; 3 lecture hours. 3 credits. Prerequisites: Business 272 required. Business 370 recommended. • Overviews the various steps in the development of an advertising strategy. Special stress placed on the study of the creative philosophies and work of leading advertising agencies.

Business 373 Consumer Behavior Both semesters; 3 lecture hours. 3 credits. Prerequisites: Business 272; Psychology 201 and Sociology 101 recommended. • Study of the relevant psychological, sociological, and anthropological variables that shape consumer activity and motivation. Throughout course, students consider the issue of why consumers behave as they do in the marketplace.

Business 374 Marketing Research: Designs Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 272. • Concepts in the development and evaluation of research designs for gathering marketing information. Students develop a finished research proposal.

Business 375 Marketing Research: Application Second semester. 3 credits. Prerequisites: Business 272 and Business 374. • A continuing study of marketing research methodology in a workshop atmosphere. Students carry out professional caliber research projects.

Business 376 Dynamics of Retailing Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 272. • A comprehensive view of retailing as it relates to the total marketing process.

Business 377 Channel Systems Second semester; 3 lecture hours. 3 credits. Prerequisite: Business 272. • Concerns the development, complexities, benefits, and pitfalls of channel of distribution systems.

Business 378 Consumer Issues and Problems First semester; 3 lecture hours. 3 credits. Prerequisite: Business 272. • Study of the past, present, and future directions of consumerism and its interrelationships with business and government.

Business 379 Marketing to the Black Community Second Semester; 3 lecture hours. 3 credits. Prerequisite: Business 272. • In-depth exposure to current issues and opportunities involving black participation in the contemporary marketplace.

Business 401 Cost Accounting First semester; 3 lecture hours. 3 credits. Prerequisite: Business 204. • Cost accumulation for inventory pricing and

income determination. Cost behavior concepts for planning and control. Job order and process cost systems, standard costs and budgeting.

Business 402 Managerial Cost Accounting Second semester; 3 lecture hours. 3 credits. Prerequisite: Business 401. • Special topics in relevant costs for decision-making, planning and control, including applications of operations research and statistics.

Business 404 Financial Accounting III (Advanced) Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 304. • Financial accounting for complex business relationships, including home office-branch accounting, business combinations, consolidated financial statements, investments, and intangible assets.

Business 405 Tax Accounting First semester; 3 lecture hours. 3 credits. Prerequisite: Business 204. • Income tax legislation and the concept of taxable income; federal income tax law applicable to individuals.

Business 406 Auditing First semester; 3 lecture hours. 3 credits. Prerequisite: Business 304. • Auditing standards, professional ethics, audit programs and working papers, internal control, Statements on Auditing Standards.

Business 407 Auditing Methods Second Semester; 3 lecture hours. 3 credits. Prerequisite: Business 406. • Application of auditing procedures such as auditing through, with, and around the computer; application of advanced statistical sampling plans to auditing problems for independent as well as internal auditors.

Business 408 CPA Problems Second semester; 3 lecture hours. 3 credits. Prerequisites: Financial Accounting, Auditing, and Business Law. • An intensive study of the theory and practice of accounting and auditing through solution and discussion of Uniform CPA Examination problems.

Business 409 Governmental Accounting First semester; 3 lecture hours. 3 credits. Prerequisite: Business 204. • Introduction to fund accounting, with emphasis on those concepts applicable to state and local governmental agencies.

Business 410 Advanced Tax Accounting Second semester; 3 lecture hours. 3 credits. Prerequisite: Business 405. • Complex tax problems of the trust, partnership, and corporation. Particular emphasis is given to tax planning.

Business 412 Statistical Methods Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 301. • Course includes additional study of sampling and probability. Other topics include tests of significance, correlation, index number construction, and chi-square as these topics have application to business and economic problems.

Business 413 Managerial Accounting Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 203-204. • The attention-directing and problem-solving functions of accounting in relation to current planning and control, evaluation of performance, special decisions, and long-range

planning. Restricted to students who have not completed Business 401-402 or the equivalent.

Business 414 Accounting Concepts Second semester; 3 lecture hours. 3 credits. Prerequisite: Business 304. • Capstone course in financial accounting theory, with emphasis on the needs of the users of financial accounting information.

Business 415 Investments Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 203 or permission of instructor. • A survey of investment principles and practice. Emphasis is given to problems of security analysis and portfolio management.

Business 417 Cases in Financial Management Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 311. • Cases involving financial decisions for various forms of business enterprises.

Business 418 International Business Administration 3 lecture hours. 3 credits. Prerequisite: Business 320 or permission of instructor • The legal, marketing, management, financial, and cultural aspects of international business from the standpoint of the manager of the U.S. firm.

Business 419 Case Studies in Federal Income Taxation Second semester; 3 lecture hours. 3 credits. Prerequisite: Business 405. • Tax problems of corporate liquidations, corporate reorganizations, collapsible corporations and corporate capital structure.

Business 420 Seminar in Industrial Relations Second semester; 3 lecture hours. 3 credits. Prerequisite: Business 331 or permission of instructor. • Managerial decision-making in labor-management relationships; the collective bargaining process and the administration of labor agreements; the impact of public policy and labor legislation.

Business 421 Small Business Management Both semesters; 3 lecture hours. 3 credits. • The importance, problems, and requirements of small businesses; establishing policies for prices, promotion, control, and credit; regulations, taxes, records, and record keeping.

Business 422 Principles of Real Estate Both semesters; 3 lecture hours. 3 credits. • Principles and practices of real estate development, financing, brokerage, appraisal, legal instruments, and federal housing policies.

Business 423 Real Estate Brokerage 3 lecture hours. 3 credits. • Considers administrative principles and practices of real estate brokerage, financial control and marketing of real property.

Business 424 Property and Liability Insurance Second semester; 3 lecture hours. 3 credits. Prerequisite: Business 423 or permission of instructor. • Study of coverage and rating in the following areas of insurance: fire, marine, automobile, general liability, workmen's compensation, theft, and fidelity; and study of surety bonds.

Business 425 Real Estate Appraisal Second semester; 3 lecture hours. 3 credits. • Designed for persons who have completed a course in prin-

ciples of real estate, its equivalent, or had experience in the real estate appraisal field. Neighborhood and site analysis, cost, market, and income approaches. Qualified students may apply to write AIREA Examination IA at the end of this course.

Business 426 Life and Health Insurance First semester; 3 lecture hours. 3 credits. • Study of the function and uses of life insurance, health insurance, and annuities; and study of the Social Security System.

Business 427 Labor Law and Legislation Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 323 or permission of instructor. • A comprehensive review of labor law and legislation applicable to business.

Business 429 Real Estate Finance First semester; 3 lecture hours. 3 credits. Prerequisite: Business 422 or permission of instructor. • Instruments, techniques, and institutions of real estate finance; sources of funds; the mortgage market; mortgage risk analysis; creative financing; emphasis on typical policies and procedures used in financing residential, industrial, and commercial properties, including commercial leasing.

Business 430 Social Insurance Both semesters; 3 lecture hours. 3 credits. • Societal and individual financial problems encountered as the result of disability, unemployment, aging, and death. Insurance solutions through governmental and private techniques.

Business 432 Operations Planning and Control Both semesters; 3 lecture hours. 3 credits. Prerequisites: Business 301 and Business 320 or permission of the instructor. • Analyzes the operational problems of organizations: process analysis, man-machine interfaces, work measurement, work sampling standards, layouts, scheduling, and quality control.

Business 433 Job Evaluation Second semester; 3 lecture hours. 3 credits. • The methods and techniques of obtaining job descriptions, job characteristics and measuring scales, job rating, and the awarding of wage increments.

Business 434 Policy Determination Both semesters; 3 lecture hours. 3 credits. • Capstone course normally taken in final senior semester. Analysis of complex policy problems at the overall management level, involving such functional areas as production, finance, and marketing, in context with the economic, political, and social environment.

Business 435 Seminar in Personnel Management First semester; 3 lecture hours. 3 credits. Prerequisite: Business 331 or permission of instructor. • A critical study of selected problems in personnel management.

Business 437 Funds Management in Financial Institutions Second semester; 3 lecture hours. 3 credits. • Funds management techniques for selected financial institutions including investment companies (mutual funds), life and casualty insurers, savings and loans, mutual savings banks, commercial banks, pension funds.

Business 438 Office Management Both semesters; 3 lecture hours. 3 credits. • The planning and installing of correct office methods and sys-

tems; securing effective correspondence and stenographic work; improving mailing, filing, and duplicating methods; preparation of reports; office problems of special departments; and employee supervision and control.

Business 443, 444 Specialized Office Machines I and II Semester courses; 1 lecture hour and 2 laboratory hours. 2-2 credits. • Machines which a student can learn to operate include: electric typewriters, adding and calculating machines, ten-key calculating machines, stencil duplicators, offset duplicators, fluid duplicators, bookkeeping machines, dictating and transcribing machines.

Business 448, 449 Professional Secretarial Training Semester courses; 3 lecture hours. 3, 3 credits. • Designed for secretaries who desire to broaden their educational background. Special emphasis is placed on accounting, business administration, human relations, personal adjustment, general secretarial and office procedures, letter composition, and public speaking. The year course will serve as partial preparation for the Certified Professional Secretary examination given each May by the National Secretaries Association.

Business 453 Teaching Bookkeeping and Basic Business Both semesters. 3 lecture hours. 3 credits. • Designed for prospective teachers of bookkeeping, general business, arithmetic, and other basic business subjects. It encompasses methods of teaching these subjects and a survey of currently used textbooks and available resource material.

Business 455 Teaching Secretarial Subjects Both semesters; 3 lecture hours. 3 credits. • Designed for prospective teachers of shorthand, typewriting, and office practices. It encompasses methods of teaching these subjects and a survey of currently used textbooks and available resource material.

Business 460 Data Processing Systems and Methods Both semesters; 3 lecture hours. 3 credits. Prerequisites: Business 360 or permission of instructor. • Tools and techniques of systems analysis and the design process as it relates to the development of computer-based, business-oriented information systems.

Business 461-462 Unit Record Equipment Continuous course; 3 lecture hours. For business education majors and business teachers only. 3-3 credits. • Designed to provide a working knowledge of unit record equipment including the card punch, sorter, interpreter, collator, reproducing punch, and accounting machine. Laboratory exercises involving planning for and wiring the equipment will be completed.

Business 463-464 Digital Computer Programming Continuous course; 3 lecture hours. For business education majors and business teachers only. 3-3 credits. • The basic concepts of digital computers. All computer devices and techniques will be discussed. A basic business computer language will be taught and used to solve business problems. Laboratory exercises involving planning for and writing programs for the equipment will be completed.

Business 465 Computer Simulation Techniques Both semesters; 3 lecture hours. 3 credits. Prerequisites: Business 360 or permission of instructor. • Use of the computer and simulation programming languages to develop management information, by simulation, for problems involving waiting lines, inventories, and scheduling systems.

Business 466 Management of Data Processing Installations Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 460 or permission of instructor. • Emphasizes advanced management concepts in computer operations environment. Topics considered include feasibility studies, systems evaluation, real time and time sharing operations, and simulation of business operations.

Business 467-468 COBOL Programming Continuous course; 3 lecture hours. 3 credits. • An introduction to and the utilization of the Common Business Oriented Language. This relatively machine-independent compiler language will be used by students to express the solutions of business-oriented problems to the computer.

Business 470 Field Consulting in Promotion First semester; 3 credits. Prerequisites: Business 272 and 371 required, Business 370 recommended. • Students apply their knowledge in marketing and promotion to the resolution of an actual advertising problem facing a Richmond firm.

Business 471 Marketing Information Systems Second semester; 3 lecture hours. 3 credits. Prerequisites: Business 272 required, Business 374 recommended. • A study of the characteristics, opportunities, and pitfalls in the development and management of computer-based, marketing information systems.

Business 472 Trends in Retailing Second semester; 3 lecture hours. 3 credits. Prerequisites: Business 272 and 273 required. Business 376 recommended. • An examination of current and developing trends that will affect the future posture of retailing.

Business 473 Marketing for Non-Business Organizations First semester; 3 credits. Prerequisite: Business 272 or permission of instructor; Business 374 recommended. • Stresses the application of marketing for non-business organizations, such as hospitals, museums, universities, and police departments. Students participate in the research for and development of a marketing plan for an actual non-business organization in the Richmond area.

Business 474 Comparative Marketing Systems Second semester; 3 lecture hours. 3 credits. Prerequisite: Business 272. • Study of the approaches to marketing found throughout the world. Marketing systems in all stages of development are examined.

Business 476 Marketing Management Both semesters. 3 credits. Prerequisite: restricted to senior-level marketing majors. • A case course requiring the senior marketing student to apply his knowledge to the solving of marketing managerial problems.

Business 477 Topic Seminar in Marketing Both semesters; 3 credits. Prerequisite: Business 272. • In-depth treatment within a seminar format of a timely topic within marketing. The topic will vary from semester to semester.

Business 478 Honors Course in Marketing First semester; 3 credits. Prerequisite: by invitation only. • The experiences for the course will be determined by the student after the course convenes.

Business 479 Marketing Internship Both semesters; 1-3 credits. Prerequisite: marketing majors only and permission of instructor. • Intention to enroll must be indicated to the instructor prior to or during advance registration for semester of credit. Involves students in a meaningful experience in marketing and supplementary businesses.

Business 487 Management Decision Methods Both semesters; 3 lecture hours. 3 credits. Prerequisite: Business 301 or its equivalent. • Quantitative and non-quantitative techniques for solving organizational problems. Includes decision making, operations problem solving, linear programming, scheduling, queueing, forecasting, and inventory control.

Business 491-492 Independent Study Both semesters; 1-3 credits with a maximum total of 3 credits. Prerequisites: junior or senior standing as a major in a business curriculum, approval of advisor and department chairman prior to registration. • Intensive study under supervision of a faculty member in an area not covered in depth or contained in the regular curriculum.

Business 499 Management Seminar Second semester; 3 lecture hours. 3 credits. Prerequisite: senior standing in business management or consent of instructor. • A critical analysis of management concepts.

For the listing of graduate courses in the School of Business see the **Graduate Bulletin**.

COURSES IN ECONOMICS

Economics 201-202 Principles of Economics Continuous course; 3 lecture hours. 3-3 credits. • A course designed to acquaint the student with a theoretical and practical understanding of the economic institutions and problems of the American economy.

Economics 203 Introduction to Economics Both semesters; 3 lecture hours. 3 credits. • A survey of economic principles, institutions, and problems in the United States. The course is designed to provide basic economic understanding for students who do not expect to take additional economics courses.

Economics 301 Microeconomic Theory First semester; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • Analysis of value and distribution. Supply and demand, theory of the firm, competition and monopoly. Determination of prices and wages in a market economy.

Economics 303 Theory of the Firm Both semesters; 3 lecture hours. 3 credits. Prerequisites: Economics 201-202 and Business 101-102. • This course is designed to show the importance of economic techniques to the prospective manager of a modern enterprise. The student learns the choice criteria of production and sales processes and the substitutability of inputs and outputs. It explores the effects of rival firms, changing social and business institutions, and technological change on current and past decision criteria.

Economics 305 Public Finance—State and Local First semester; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • A description and analysis of state and local government taxing and spending policies and practices. The course is designed to develop an understanding of state and local fiscal operations and their relationship with federal fiscal operations.

Economics 306 Public Finance—Federal Both semesters; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • A survey of the principles, practices, and problems of federal finance; the nature and growth of federal expenditures; the nature and effect of various types of federal taxes; fiscal policy and administration; the public debt and its impact on the economy.

Economics 307 Money and Banking Both semesters; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • A study of money, its nature, its issuance, and its control. Emphasis is on the institutional aspects of our monetary structure, especially the role of the banking system in the creation of money and of the Federal Reserve System in the control of the money supply.

Economics 308 Economic Geography Second semester; 3 lecture hours. 3 credits. • A study of the world's important agricultural and mineral resources dealing principally with factors controlling regional distribution, production, transportation, and consumption.

Economics 309 International Trade First semester; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • An analysis of the fundamentals of world trade, the significance of economic and geopolitical influence on exports and imports, and problems and policies relating to foreign investment.

Economics 310 Economics and Poverty Second semester; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • A study of the economic problems of low-income groups and agency and foundation programs designed to encounter these problems.

Economics 313 Economics of Transportation 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • An economic analysis of the transportation industry with special emphasis on the problems of regulation, public policy, and urban transportation.

Economics 317 Money and Banking in the Black Financial Community Second semester; 3 lecture hours. 3 credits. Prerequisite: Economics 201-

202. • Money and banking blended with the problems of black finance. The course is acceptable as a substitute for Economics 307.

Economics 319 Economic History of the United States Second semester; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • An analysis of the developmental factors from the American colonial period to the present. Includes quantitative research topics in American economic history.

Economics 320 Economic History of Europe First semester; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202 or Economics 203. • Studies of the origins and development of modern capitalistic economies with emphasis on transitional factors and institutional changes.

Economics 401 Introduction to Econometrics Both semesters; 3 lecture hours. 3 credits. Prerequisites: Economics 201-202 and Business 301. • Sources and uses of economic data; includes the application of statistical methods and regression analysis to time series and cross section data to test hypotheses of micro and macro economics.

Economics 402 Business Cycles and Forecasting Both semesters; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • An examination of the cyclical variations in economic activity; the measurement of economic fluctuations; analysis of business cycle theory; control of business cycles; stresses modern forecasting techniques.

Economics 403 Introduction to Mathematical Economics Semester course; 3 lecture hours. 3 credits. Prerequisite: Business 102 or Mathematics 204 and Economics 201-202. • The application of mathematical techniques to economic theory and economic models.

Economics 405 Managerial Economics 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • The application of economic analysis to managerial decision-making in relation to problems of supply and demand, prices, profits, production, and distribution. Special emphasis on the role of competition in decision making.

Economics 407 Macroeconomic Theory 3 lecture hours. 3 credits. Prerequisite: Economics 307. • A general survey of national income analysis and macroeconomic theory. Detailed study of public policies affecting price levels, employment, economic growth, and the balance of payments.

Economics 409 Monetary Trade Theory 3 lecture hours. 3 credits. Prerequisite: Economics 309 or consent of instructor. • Introduces money into international trade theory, examining alternative international monetary systems, the balance of payments, fixed vs. flexible exchange rates systems, and fiscal monetary adjustment mechanisms.

Economics 412 Regional Economics 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • A course to familiarize students with courses and uses of standard data on employment, income, and population and to provide an introduction to economic base theory as used in regional economics. Application of theory to make and analyze economic and demographic projections for regions in Virginia. Analysis of operation and impact of area economic development programs.

Economics 421 Government and Business Both semesters; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • Designed primarily to study the many ways in which business and economic life are directed by government. Topics covered include the economics of monopoly power; the antitrust laws, and their application and enforcement.

Economics 431 Labor Economics Both semesters; 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • The objective of this course is to acquaint the student with the nature and causes of labor-management problems in the United States. Subjects included are the historical background of labor movements, theories of labor movements, wage theories, theories of employment, labor legislation, collective bargaining.

Economics 432 Manpower Economics 3 lecture hours. 3 credits. Prerequisite: Economics 201-202. • Considers supply features of the labor market. Emphasis upon evaluating existing federal manpower programs and the effectiveness of manpower and training strategies designed to increase employment.

Economics 499 Senior Seminar in Economics Second semester; 3 lecture hours. 3 credits. Enrollment by consent of instructor. • Papers on current research of guests, faculty, and enrolled students. Analysis of current economic problems on advanced level.

For the listing of graduate courses offered by the Department of Economics, see the **Graduate Bulletin**.

COURSES IN RETAILING

Retailing 205 Principles of Salesmanship Both semesters; 3 lecture hours. 3 credits. • To develop selling standards that will help those who sell do so with greater efficiency, through a creative approach, understanding buying motives, organizing sales presentations, and suggestion selling. Application of techniques through demonstrations, projects, and case studies.

Retailing 209 Display Both semesters; 3 lecture hours. 3 credits. • Theory and practice of the principles of display as used in retail stores and other distributive businesses.

Retailing 212 Personnel Techniques in Distribution 3 credits. • Study of the supervisor's role in distribution; current personnel policies and practice; the human problems in personnel relationships.

Retailing 321, 322 Food Distribution Both semesters. 3 credits. Prerequisite: Business 272 or permission of instructor. • Provides information about the specific practices and problems of businesses engaged in the wholesale and retail distribution of food.

Retailing 405 Retail Training Methods First semester; 3 lecture hours. 3 credits. • The techniques of individual and group training as applied to employees of a store. Practice is given in the preparation of teaching outlines and the application of varied training methods. Students plan and present department meetings on information and skills.

Retailing 407 Directed Retailing Experience First semester; 4 credits.

• Two sessions of directed practical experiences in retail stores. The first requires a minimum two months of full-time work in sales or sales supporting positions during July and August just prior to the senior year. The second phase comes in November and December when students assume supervisory and junior executive responsibilities in retailing. Written projects and evaluations are presented for each segment of experience.

Retailing 410 Retail Sales Promotion First semester; 3 lecture hours. 3 credits. • The scope and activities of sales promotion in stores with emphasis on the coordination of advertising, display, special events, and publicity. External and internal methods of promoting business; budgeting, planning, and implementing the plan.

Retailing 416 Retail and Marketing Research Project Second semester; 6 weeks of research. 5 credits. • Coordinated and supervised research in retail stores and other distributive businesses solving problems designed by the stores and businesses which need study and analysis. Under the direction of an administrative executive, the students compile a complete report of facts and findings in a research project which is submitted to the university and to the store or business.

Retailing 420 Trends and Problems in Retailing First semester. 3 credits. • Presentation and discussion of recent trends and current pressing problems in the retail industry.

Retailing 421 Small Retail Store Management Second semester. 3 credits. • The importance, problems, and requirements of small retail stores, The financing, organizing, selecting location, buildings, and layout, establishing policies of personnel, pricing, promotion, credit, and control, regulations, taxes, records, and record keeping. Students work on all stages in the planning and organization of a new small store.

Retailing 425 Retail Finance and Control Second semester; 3 lecture hours. 3 credits. • A study of the control division of a store including planning, inventory control, expense control, credit, financing, and other control functions.

Retailing 426 Merchandising First semester; 3 lecture hours. 3 credits. • A study of the cycles of merchandising, analysis of past performance in departmental operating statements, all types of planning, buying, use of tools of stock management, aids to selling. Management viewpoint stresses ways of increasing sales and profit through planning and adjustment to current conditions.

PART IX—SCHOOL OF COMMUNITY SERVICES

HARLAND W. WESTERMANN, Dean

DAVID L. AMES, Associate Dean

GEORGE R. JARRELL, Assistant Dean

The School of Community Services aims to produce a broadly educated person imbued with a sense of social responsibility and prepared through study, research, and field experience to perform competently both as a citizen and as a professional, providing human services in a complex urban environment.

UNDERGRADUATE PROGRAMS

The school offers a bachelor of science degree in the fields of:

- Administration of Justice and Public Safety
- Recreation
- Rehabilitation Services
- Social Welfare
- Urban Studies

GRADUATE PROGRAMS

The School of Community Services offers graduate programs leading to the master of science in rehabilitation counseling (M.S.), and master of urban and regional planning (M. U. R. P.). Detailed information is available in the **Graduate Bulletins** available in the dean's office.

FRESHMAN-SOPHOMORE CORE CURRICULUM

All students seeking baccalaureate degrees offered by the School of Community Services are required to fulfill the following two-year core curriculum.

<i>First Year</i>	<i>Core Curriculum</i>	<i>Credits</i>	
		<i>1st Sem.</i>	<i>2nd Sem.</i>
CSE 115-116.	The American City	3	3
English 101-102.	Composition and Rhetoric	3	3
Mathematics 101.	College Algebra		
or			
Mathematics 113.	Survey of Finite Mathematics	3	—
Statistics 213.	Introduction to Statistics	—	3
Electives	.....	6	6
		15	15
<i>Second Year</i>			
CSE 211-212.	Social Problems and Prospects	3	3
CSE 241-242.	Methods of Community Analysis	3	3
or			
Laboratory Science (biology, physics, chemistry)	.....	4	4
Electives in the humanities	.....	3	3
Electives	.....	6	6
or			
Departmental survey course	.....	3	3
and			
Electives	.....	3	3
		15-16	15-16

DEPARTMENTAL SURVEY COURSES

- CSE 251. Survey of the Administration of Justice
- CSE 252. Introduction to the Juvenile Justice System
- CSE 253. Introduction to Corrections
- CSE 261-262. Recreation in Modern Society
- CSE 281. Introduction to Social Welfare
- CSE 291. Introduction to Rehabilitation Services

STUDENT ADVISING

Students entering the School of Community Services will be assigned a faculty advisor in the department of their major. Students who have not made a decision concerning their major will be assigned faculty advisors by the assistant dean, Room 121, in the Old Gymnasium. Any student requiring help concerning a change of major and advising during advance

registration periods should contact the assistant dean. The change of major may be requested during the first eight weeks of each regular semester.

ADMINISTRATION OF JUSTICE AND PUBLIC SAFETY

JAMES D. STINCHCOMB, Chairman of the Department

James L. Hague / Carroll R. Hormachea / Kenneth R. McCreedy
R. Michael McDonald / James P. Morgan, Jr. / Robert C. Phelps
Ronald J. Scott / E. Preston Sharp / Darryl K. Sheley

Part-time—John J. Birdsell / John T. Hanna / Michael Morchower

The major objective of this program is to prepare men and women for professional careers in the areas of public safety and the administration of justice. In addition to the many new opportunities in federal, state, and local public safety, the student may choose to study for a career in industrial security, correctional rehabilitation, criminalistics, or traffic safety. He may decide also to pursue graduate study in law, higher education, criminal justice planning, or several human services related to the administration of justice. Additionally this program offers the inservice criminal justice employee the opportunity to enhance his professional development through further higher education.

Students majoring in administration of justice and public safety receive a broad educational background as well as professionally oriented courses in their special area of concentration. Currently the areas of concentration available include police planning and management, corrections, juvenile justice, and highway and traffic safety. Upon completion of this program the student is awarded the bachelor of science degree in administration of justice and public safety (122 semester hours.)

Administration of Justice and Public Safety (AJPS) majors enrolled within the School of Community Services Core Program are required to complete the following: CSE 251 and AJP 260; in addition to either one of the following: CSE 252 or AJP 240. Students may select CSE 253 in lieu of 251.

In addition, AJP, 324, 480 and 390 or 491 are required of all majors.

Option in Police Planning and Management

Third Year	Credits	
	1st Sem.	2nd Sem.
AJP 324. Courts and the Judicial Process	3	—
AJP 360. Comparative Law and Criminal Responsibility	—	3
AJP 342. Public Safety in the Changing Community	3	—
AJP 355. Trends in Police Administration	—	3
AJP 431. Criminal Justice: Management Concepts	3	—
AJP 432. Criminal Justice: Organizational Dynamics	—	3
Sociology 403. Criminology	3	—
Electives	3	6
	<hr/> 15	<hr/> 15

	Credits	
	1st Sem.	2nd Sem.
<i>Fourth Year</i>		
AJP 471. Scientific Research and Crime Analysis	3	—
AJP 475. Case Studies in Evidence	—	3
AJP 480. Seminar: Critical Issues in Criminal Justice ..	—	3
AJP 390. Criminal Justice Field Internship	3-6	—
or		
AJP 491. Directed Individual Study	—	3
Urban Studies 422. Programming and Budgeting	—	3
Electives	6	3
	<hr/> 15	<hr/> 15

Option in Corrections

<i>Third Year</i>		
AJP 324. Courts and the Judicial Process	3	—
AJP 352. Crime and Delinquency Prevention	3	—
AJP 363. Correctional Law	—	3
AJP 431. Criminal Justice: Management Concepts	3	—
AJP 432. Criminal Justice: Organizational Dynamics ..	—	3
Sociology 403. Criminology	3	—
Sociology 331. Juvenile Delinquency	—	3
Electives	3	6
	<hr/> 15	<hr/> 15

<i>Fourth Year</i>		
AJP 451. Correctional Administration	3	—
AJP 455. Community-Based Correctional Programs	3	—
AJP 460. Evaluation and Treatment of the Offender ..	—	3
AJP 474/URS 574. Correctional Institution Development and Design	—	3
AJP 480. Seminar: Critical Issues in Criminal Justice .	3	—
AJP 390. Criminal Justice Field Internship	3-6	—
or		
AJP 491. Directed Individual Study	—	3
RES 450. Applied Rehabilitation Methods	—	3
Electives	3	3
	<hr/> 15	<hr/> 15

Option in Juvenile Justice

<i>Third Year</i>		
AJP 325. Juvenile Justice Law and Process	3	—
AJP 352. Crime and Delinquency Prevention	—	3
AJP 431. Criminal Justice: Management Concepts	3	—
AJP 452. Juvenile Justice Administration	—	3

	Credits	
	1st Sem.	2nd Sem.
Sociology 331. Juvenile Delinquency	3	—
Social Welfare 307. Man in Society	—	3
Electives	6	6
	15	15
<i>Fourth Year</i>		
AJP 455. Community-Based Correctional Programs	3	—
AJP 460. Evaluation and Treatment of the Offender	—	3
AJP 390. Criminal Justice Field Internship	3-6	—
or		
AJP 491. Directed Individual Study	—	3
AJP 480. Seminar: Critical Issues in Criminal Justice ..	—	3
Sociology 403. Criminology	3	—
Electives	6	6
	15-18	15

RECREATION

JAMES R. SELLERS, Chairman of the Department

Morton B. Gulak / Marion M. Hormachea / Philip Lavelly

Michael S. Wise / Linda L. Odum / Robert Rugg

The basic objective of the Department of Recreation is to prepare the student for a middle management or planning position in one of three areas of concentration: public recreation, recreation resource management, or recreation in special settings.

The Department of Recreation offers the bachelor of science degree in recreation. Graduates may find career opportunities in a variety of public, private, and commercial "open-space settings." Those include municipal and regional recreation programs, state and federal resource management programs, institutional recreation programs, and private and commercial recreation resort developments. The student is prepared to pursue graduate study in the field of recreation at a number of major universities.

Students take the community services curriculum program in the first two years. Those who expect to major in recreation should take CSE 261 and 262, Recreation in Modern Society, as electives in their first two years. If they have not done so, they will have to include them in their third year.

For the bachelor of science degree in recreation, 124 semester hours, including the recreation internship, are required. A maximum of 44 credits in recreation may be presented for the baccalaureate degree. A minimum of 45 upper-level credits must be presented for graduation. (See "Degree Requirements" elsewhere in the catalogue.)

Option in Municipal and Regional Recreation

Students seeking specialization in the public recreation option must complete the following requirements:

	Credits	
	1st Sem.	2nd Sem.
<i>Third Year</i>		
Recreation 301. Recreation Participant Profiles	3	—
Recreation 302. Economics of Recreation	3	—
Recreation 321. Recreation Demand Analysis	—	3
Recreation 331, 332. Recreation Site Selection and Development	4	4
Recreation 395. Recreation Program Development	—	3
Social Welfare 307. Man in Society	—	3
Electives	6	3
	<hr/> 16	<hr/> 16

Summer

Recreation 401. Recreation Internship	—	6
---	---	---

Fourth Year

Recreation 402. Recreation Administration	3	—
Recreation 451, 452. Municipal and Regional Recreation	3	3
Recreation 494. Seminar: Public Recreation	—	3
Urban Studies 421. Operations of Municipal Agencies ..	3	—
Urban Studies 422. Programming and Budgeting	—	3
Electives	3	3
	<hr/> 12	<hr/> 12

Option in Recreation Resource Management

Students seeking specialization in the recreation resource management option must complete the following requirements:

	Credits	
	1st Sem.	2nd Sem.
<i>Third Year</i>		
Recreation 301. Recreation Participant Profiles	3	—
Recreation 302. The Economics of Recreation	3	—
Recreation 321. Recreation Demand Analysis	—	3
Recreation 331, 332. Recreation Site Selection and Development	4	4
Recreation 395. Recreation Program Development	—	3
Urban Studies 302. The Use of Urban Land	—	4
Electives	6	3
	<hr/> 16	<hr/> 17

Summer

Recreation 401. Recreation Internship	6
---	---

	Credits	
	1st Sem.	2nd Sem.
Fourth Year		
Recreation 402. Recreation Administration	3	—
Recreation 461, 462. Recreation Resource Management	3	3
Recreation 496. Seminar: Recreation Use of Natural Resources	—	3
Urban Studies 431, 432. Introduction to Urban and Regional Planning	3	3
Electives	3	3
	<hr/> 12	<hr/> 12

Option in Recreation with Special Populations

Students seeking specialization in the recreation in special settings option must complete the following requirements:

	Credits	
	1st Sem.	2nd Sem.
Third Year		
Recreation 301. Recreation Participant Profiles	3	—
Recreation 302. The Economics of Recreation	3	—
Recreation 321. Recreation Demand Analysis	—	3
Recreation 331, 332. Recreation Site Selection and Development	4	4
Recreation 395. Recreation Program Development	—	3
Rehabilitation Counseling 425. Introduction to Rehabilitation	—	3
Electives	6	3
	<hr/> 16	<hr/> 16

Summer

Recreation 401. Recreation Internship	6
---	---

Fourth Year

Recreation 402. Recreation Administration	3	—
Recreation 471, 472. Recreation in Institutional Settings	3	3
Recreation 498. Seminar: Recreation in Special Settings	—	3
Psychology 427. Psychology of the Handicapped	—	3
Rehabilitation Counseling 439. Current Problems in Rehabilitation	3	—
Electives	3	3
	<hr/> 12	<hr/> 12

REHABILITATION COUNSELING

RICHARD E. HARDY, Chairman of the Department
R. Dean Taylor, Coordinator—Undergraduate Studies

Paul E. Biles / John G. Cull / John D. Hutchinson / George R. Jarrell
Robert A. Lassiter / Linda L. Odum / Warren R. Rule / Leo A. Thralls
Keith C. Wright

Part-time—Robert L. Brocklehurst / William T. Coppage / S. James Cutler
James B. Funkhouser / Fletcher Hall / Franklin P. Hall / Ann F. Houston
Carl W. Lafratta / Jerry Lawson / Charles H. Merritt
Tracy O'Hanlan / Jane B. Rule / Thomas F. Updike / John H. Wallace
Joseph H. Wiggins

The Department of Rehabilitation Counseling was established in 1955 to provide graduate education in rehabilitation counseling. The graduate program in rehabilitation counseling prepares prospective rehabilitation counselors for employment in state-federal rehabilitation programs and public and private agencies. Graduates work in rehabilitation units in mental hospitals, correctional institutions, public schools, private and public rehabilitation centers, sheltered workshops, adjustment centers, social service agencies, and other organizations serving persons who are mentally, emotionally, socially, or physically handicapped for employment. The program also provides advanced education for persons presently employed in agencies and facilities offering services to handicapped persons.

Emphasis is placed upon professional education for developing the skills and knowledge necessary for effective rehabilitation counseling of handicapped persons. The variety of activities performed by rehabilitation counselors necessitates a highly diversified program. In addition to the development of a broad understanding of human behavior, techniques of individual and group counseling, interpersonal relations, vocational appraisal and adjustment, caseload management, and use of community resources in facilitating the rehabilitation of mentally, emotionally, socially, and physically handicapped persons are stressed. Graduate study in this department leads to the master of science degree in rehabilitation counseling. A catalog of graduate offerings is available on request.

REHABILITATION SERVICES

The bachelor of sciences program in rehabilitation services is designed to prepare rehabilitation specialists to work with individuals whose problems include chronic unemployment or underemployment. The curriculum is directed toward understanding the dynamics of the world of work with emphasis upon the development of skills and knowledge necessary for effective human resource development and management. Emphasis is placed on the concepts of disability, work evaluation and adjustment, interpersonal facilitation and helping relationships, methods of analysis and use of information in the rehabilitation process.

The interdisciplinary nature of the curriculum will allow for a broad based and sound general education including opportunities for the student to

develop skills and knowledge, cutting across a number of disciplines, with opportunities for specialization. Graduates will be prepared to enter areas of employment such as work evaluation, and work adjustment, vocational rehabilitation and employment services.

The bachelor of science degree in rehabilitation services requires the completion of 125 credit hours of study. Of these, a minimum of 30 credit hours (and a maximum of 36 credit hours) are to be taken as upper-division rehabilitation services courses. The remaining 89 to 95 credits are comprised of 62 credit hours of required courses (other than rehabilitation services) and 21 credit hours of electives. A minimum of 45 credit hours of upper division courses are required for graduation. The student will be encouraged to select a second area of concentration from such disciplines as corrections, economics, social welfare, psychology, special education, or urban studies.

Students should take Economics 201-202, Sociology 101, and Psychology 201 in their first two years in order to meet upper division prerequisites of required courses.

	Credits	
	1st Sem.	2nd Sem.
<i>Third Year</i>		
RES 301. Development of Rehabilitation Potential	3	—
RES 312. Contemporary Rehabilitation Services	—	3
RES 360. Work Evaluation and Adjustment	3	—
Psychology 310. Industrial Psychology	—	3
Psychology 320. Social Psychology	3	—
Urban Studies 303. Introduction to Urban Systems	3	—
Urban Studies 452. Urban Economic Base	—	3
Social Welfare 425. Income Maintenance	—	3
Electives	3	3
	15	15
<i>Summer</i>		
RES 455. Practicum in Rehabilitation	6	—
<i>Fourth Year</i>		
RES 439. Current Problems in Rehabilitation	3	—
RES 450. Applied Rehabilitation Methods	—	3
RES 456. Interpretative Processes in Rehabilitation	3	—
RES 461. Work Evaluation Techniques	3	—
RES 462. Work Adjustment Techniques	—	3
Psychology 424. Occupational Information and Job Analysis	3	—
Sociology 476. Occupations and Professions	—	3
Economics 432. Manpower Economics	—	3
Electives	3	—
	15	12

SOCIAL WELFARE

NORMAN E. EGGLESTON, Chairman of the Department

William C. Albert / Bettianne Anderson / Janet Armstrong
 David P. Beverly / Jeanne E. Diana / Margaretta R. Neumann
 J. Wayne Newton / Jacqueline Parker / Vincent Perry
 Florence Segal

The department's primary objective is to prepare students for social service careers. Additional objectives are to prepare students to continue their education in social work or other graduate programs and to provide courses for other disciplines to increase knowledge and skills related to human functioning, policy development, and human services.

In the first two years of college, the social welfare student takes courses required in the core curriculum of the School of Community Services. CSE 281, Introduction to Social Welfare, may be taken in the core curriculum.

Requirements for graduation with a major in social welfare include 33 credits in upper division social welfare courses and a 12-credit concentration at the upper-division level in a department other than social welfare. The remainder of the 125 credits required for graduation are planned individually with the student according to his career goals and interests.

The intent is to provide social welfare majors with an appropriately varied college education, along with the specialized knowledge and skills required for beginning social work practice. The student's selection of courses for credit toward graduation is subject to approval by the department. The department may require additional courses to correct deficiencies in the student's education.

	Credits	
	1st Sem.	2nd Sem.
<i>Third Year</i>		
Social Welfare 305. Interventive Methods	2	—
Social Welfare L305. Lab	1	—
Social Welfare 403. Social Casework	—	2
Social Welfare L403. Lab	—	1
Social Welfare 307-308. Man in Society	3	3
Social Welfare 321. Development of Social Welfare ..	3	—
Social Welfare 322. Social Welfare Legislation and Services	—	3
Cognate	3	3
Electives	3	6
	<hr/> 15	<hr/> 18

Fourth Year

Social Welfare 409-410. Field Work	3	3
Social Welfare 405. Social Group Work	2	—
Social Welfare L405. Lab	1	—
Social Welfare 434. Community Organization	—	2
Social Welfare L434. Lab	—	1

	Credits	
	1st Sem.	2nd Sem.
Social Welfare Programs Course, selected from:	3	—
Social Welfare 422. Social Work in Health Programs (3 credits)		
Social Welfare 425. Income Maintenance Programs (3 credits)		
Social Welfare 426. Family and Child Welfare Programs (3 credits)		
Social Welfare 427. Social Work in Criminal Justice Programs (3 credits)		
Cognate	3	3
Approved Electives	3	6
	<hr/> 15	<hr/> 15

Number of upper division social welfare credits required: 33

Social Welfare Electives

Any of these courses may be elected in addition to those required.

Social Welfare 351/Recreation 351. Recreation Programming for Pre-School Children (3 credits)

Social Welfare 401. Current Issues in Social Welfare (3 credits)

Social Welfare 411. Advanced Field Work (3 credits)

Social Welfare 412. Advanced Field Work (3 credits)

Social Welfare 413, 414. Independent Study (1, 2, 3; 1, 2, 3 credits)

Social Welfare 430/Business 430. Social Insurance (3 credits)

Social Welfare 438. Family Dynamics (3 credits)

Social Welfare 439. Aging in our Society (3 credits)

Social Welfare 440. Social Policy and Aging (3 credits)

Social Welfare 459. Human Sexual Behavior (3 credits)

Social Welfare 488. Research in Social Welfare (3 credits)

Social Welfare 495. Organizational Structure and Management (3 credits)

Non-Departmental Cognate

The student must take a 12-credit concentration in another department of his choice, at the upper-division (300-400) level. Other electives may be selected with the approval of the departments to meet the university requirement of 45 upper-division credits and 125 credits to graduate.

URBAN STUDIES

DAVID L. AMES, Acting Chairman of the Department

Morton B. Gulak / John V. Moeser / Margaret G. Oslund

T. Edward Temple / Harland W. Westermann

Part-time and Adjunct—Kenneth G. Hance, Jr. / Ronald C. Johnson

Philip A. Leone / Gerald P. McCarthy / Michael C. Ritz / Stanley E. Taylor

The department emphasizes knowledge pertinent to the urban system as a whole as the basis for exploring alternative solutions to problems associated with contemporary and future urbanization. Accordingly the urban studies curriculum is intended to give the student an integrated generalist perspective on the urban phenomenon.

Specifically, the urban studies program is designed to:

1. Provide a curriculum within which students, in the tradition of liberal arts and social science education, can gain an incisive and systematic understanding of the dynamics of urbanization, with particular emphasis on knowledge of the many casual interrelationships which exist among the various urban systems; and
2. Provide students from other disciplines the opportunity to broaden their scope of knowledge in selected urban topics.

Students enroll in the School of Community Services and take the core curriculum courses during the first two years. In addition, those interested in urban studies should take Urban Studies 201, Urban Morphology, a required course with five credit hours.

The degree of bachelor of science in urban studies requires the completion of 120-122 credit hours of study, including a minimum of 60 hours beyond those required in the core curriculum. In the junior and senior years a student must successfully complete 21 hours of required urban studies courses (plus 5 hours in Urban Studies 201, Urban Morphology, if not taken previously) and 27 hours in urban studies electives and related cognate courses as approved by the student's advisor. Twelve credit hours in unspecified electives may also be chosen. The total credit hours in urban studies courses shall not exceed 42. A minimum of 45 upper level credits must be presented for graduation.

Second or Third Year

		<i>1st Sem.</i>	<i>Credits 2nd Sem.</i>
Urban Studies 201.	Urban Morphology	5	—

Third Year

Urban Studies 303.	Introduction to Urban Systems	3	—
Urban Studies 304.	Community Growth and Development	—	3
Urban Studies 311.	Urban Research and Field Methods	3	—
Urban Studies 312.	Urban Models and Evolution Procedures	—	3
or			
Urban Studies 422.	Programming and Budgeting		
Other Urban Studies	and/or cognate electives	6	6
Unspecified electives	. . . . .	3	3
		<hr/> 15	<hr/> 15

Fourth Year		Credits	
		1st Sem.	2nd Sem.
Urban Studies 302.	The Use of Urban Land	—	3
Urban Studies 431.	Introduction to Urban And Regional Planning	3	—
Urban Studies 451.	The Urban Economic Base	3	—
Other Urban Studies	and/or cognate electives	6	9
Unspecified electives	.....	3	3
		15	15

URBAN AND REGIONAL PLANNING

The master's program in urban and regional planning was established in 1973 to provide graduate education in urban and regional planning. The central concern of this program must be people. The mission of a professional urban and regional planning program is to instill in student planners the sensitivities and perspectives, coupled with the tools, to enable them to help fashion humane urban environments. Such environments—manifesting the needs and aspirations of their inhabitants—must be created within a coherent frame work of social and economic development to provide the broadest range of opportunities for individuals to meet their aspirations.

Thus the graduate program in urban and regional planning has four major goals.

1. To provide a broad but intensive background in the dynamics of urbanization with particular attention to the anticipation of future consequences of existing urban conditions.
2. To provide a rigorous professional grounding in the theory and methodologies of planning with emphasis on defining the role of planning and problem solving; their capabilities as well as their limitations.
3. To provide the opportunity to gain extensive knowledge in a specialized area of planning. Areas of concentration include both areal levels of specialization: urban (small area) or regional (large area); and topical specialization: health planning, public safety planning, recreational-environmental planning, housing planning. These areas of concentration are not intended to be comprehensive but to reflect priorities in the planning field as well as the capabilities of the faculty to give quality instruction.
4. To produce a graduate planner who can combine theoretical learning with practical experience by providing within the curriculum a balance between classroom experience and actual field experience in meeting the types of problems he will encounter as a professional planner.

COURSES IN COMMUNITY SERVICES

CSE 115-116 The American City Semester course; 3 lecture hours, 3-3 credits. • A general survey of the phenomenon of urbanization in the United States. Special emphasis is given to: the evolution of cities; the urban experiment in America; the functions of cities and their physical development; the urban economic base; the nature of the city as a society; public institutions; and urban governance.

CSE 211-212 Social Problems and Prospects Continuous course; 3 hours. 3 credits. • A preliminary analysis of the major social problems confronting our urbanized communities and the actions necessary for their solution. Income maintenance, public safety, and leisure will be the topics of study during the first semester. The second semester will include housing, employment and health care.

CSE 241-242 Methods of Community Analysis Continuous course; 1 lecture and 3 laboratory hours per semester. 3 hours. 3 credits. Methods of aggregate and areal analysis for human services. First semester considers various cartographic and statistical techniques employed in systematic analysis; second semester is the application of these techniques, using a planning district as the study area. See page 45 for laboratory fee.

CSE 251 Survey of the Administration of Justice Semester course; 3 hours. 3 credits. • Comprehensive overview of the administration of justice; assesses the extent of crime; reviews law enforcement, judicial, and correctional processes at all levels of government; discusses history and philosophy of public safety; evaluates career opportunities. Required of all majors.

CSE 252 Introduction to the Juvenile Justice Systems Semester course; 3 hours. 3 credits. • This survey course studies all segments of juvenile justice and special procedures designed for young persons; recognizes the importance of proper handling of the juvenile by the police and the courts; reviews recent developments in juvenile rehabilitation.

CSE 253 Introduction to Corrections Semester course; 3 hours. 3 credits. • A survey of societal responses to the offender; tracing the evolution of practices based on philosophies of retribution, punishment, and rehabilitation; reviews contemporary correctional activities and their relationships to other aspects of the criminal justice system; introduces the emerging area of correctional programming within the community.

CSE 261-262 Recreation in Modern Society Continuous course; 3 hours. 3-3 credits. • First semester; introduction to the historical and philosophical foundations of leisure and recreation; implications of continued growth of the leisure phenomenon in contemporary society. Second semester: evaluation of public, private, and commercial agencies that provide recreational services. Particular emphasis is given the types of leisure activities offered in relationship to the recreation market.

CSE 271 Metropolitan Studies Seminar 2 lecture hours weekly for nine weeks; 300 clock hours in a public service agency. 3 credits. • A

weekly small-group seminar for students employed in public service agencies. Generalizes the particular experience of the student in one agency to knowledge of public service career options. Emphasizes professional roles and patterns of organization in human service agencies. Admission by permission of the instructor.

CSE 281 Introduction to Social Welfare Semester course; 3 lecture hours. 3 credits. • Introduction to social welfare as a social institution and the profession of social work as one of the professional groups in social welfare. Analysis of the human needs the social welfare programs are designed to meet, and description of professional roles, their knowledge base, value assumptions and skills.

CSE 291 Introduction to Rehabilitation Services Semester course; 3 hours. 3 credits. • An introduction to rehabilitation services as these relate to the increased potential of human resources through gainful employment. This course will provide a basic understanding of a work-oriented society and of the specialized needs of individuals to become employable. The role of rehabilitation services in this effort is emphasized.

COURSES IN ADMINISTRATION OF JUSTICE AND PUBLIC SAFETY

AJP 240 Introduction to Criminalistics Semester course; 3 hours. 3 credits. • Considers the varieties of physical evidence utilized in criminalistics with emphasis on analytical and microscopic determinations by the forensic laboratory.

AJP 260 Substantive Criminal Law and Due Process Semester course; 3 hours. 3 credits. • Deals with the definitions and processing of substantive offenses along with the bases of criminal liability, defenses, and complicity. Covers the scope of individual rights under due process, emphasizing arrest, interrogations, search, and seizure.

AJP 315 Traffic Planning and Management First semester; 3 hours. 3 credits. • Contemporary and future problems of traffic, accident investigation, traffic regulation; enforcement direction, pedestrian, intersection, and parking control; records and analysis; selective enforcement; engineering and education. Traffic law and court procedure.

AJP 324 Courts and the Judicial Process Semester course; 3 hours. 3 credits. • Examines the systems that adjudicate criminal and civil law; includes constitutional authority, jurisdictions, and trial processes, with particular emphasis on reform in court administration, disposition without trial, and sentencing. Required of all majors.

AJP 325 Juvenile Justice Law and Process Semester course; 3 hours. 3 credits. Examines the juvenile court as an institution: its jurisdiction, and procedures. Considers intake, pre-trial diversion, and hearings, as well as rights and liabilities of the delinquent, dependent, and neglected child. Contrasts juvenile and adult law; projects future impact of the court.

AJP 342 Public Safety in the Changing Community Semester course; 3 hours. 3 credits. • Examines the social dimensions of criminal justice agencies and their relationship to the total community; evaluates the impact of the changing police role, conflicting forces affecting law enforcement, and public attitudes toward police.

AJP 352 Crime and Delinquency Prevention Semester course; 3 hours. 3 credits. • A review of the problems associated with the prevention of crime and delinquency. Programs and activities involving citizen, community, and agency cooperation will be developed. Students will be responsible for preparing projects with major preventive goals.

AJP 355 Trends in Police Administration Semester course; 3 hours. 3 credits. • A comprehensive examination of world-wide police organizations from historical development to current trends. Includes analysis of the differing roles of the police; management fundamentals of planning, personnel, and budgeting; and the impacts of science and technology upon operational policies. Not for community college criminal justice transfers.

AJP 360 Comparative Law and Criminal Responsibility Semester course; 3 hours. 3 credits. • A study of U.S. criminal law and jurisdiction at the federal and state levels, emphasizing history and comparison with that of foreign nations; includes a review of model code development reforms designed to insure uniformity and more directly establish criminal responsibility.

AJP 363 Correctional Law Semester course; 3 hours. 3 credits. • Examines the legal rights of both the offender and the correctional worker. Attention is given to case law and legal decisions affecting policies and procedures in probation, correctional settings, and parole. Trends influencing correctional programming and management activities will be projected.

AJP 390 Criminal Justice Field Internship Semester course; 3 credits or 6 credits. • Designed to provide the student with an opportunity to relate theory to practice through observation and experience. Must be performed in an approved agency under the supervision of an instructor. This course or AJP 491 is required of all majors. Credits to be determined according to the type of internship.

AJP 407 Industrial and Retail Security Semester course; 3 lecture hours. 3 credits. • The organization and management of industrial security and plant protection units; security, police, administrative, legal, and technical problems; special problems of government contract security; survey of specialized programs in retail security; insurance and credit investigation; transportation security; private guard and alarm service; regulatory and licensing agencies.

AJP 426 Legal Aspects of Highway Safety Semester course; 3 hours. 3 credits. • Course covers the implications of the Uniform Traffic Code, the Model Traffic Ordinance, the Highway Safety Act of 1966, and the Motor Vehicle Laws of Virginia.

AJP 431 Criminal Justice: Management Concepts Semester course; 3 hours. 3 credits. • Examines major concepts of management in criminal justice and public safety agencies with emphasis on functional and structural approaches. Formulation of policies and procedures in the optimum utilization of personnel and financial resources are considered.

AJP 432 Criminal Justice: Organizational Dynamics Semester course; 3 hours. 3 credits. • Considers the behavioral dimensions of administration in criminal justice and public safety agencies. Examines the concepts of leadership and decision-making and the effect of environmental dynamics in the management of the criminal justice system.

AJP 437 Accident Analysis and Crash Prevention Semester course; 3 hours. 3 credits. • An analysis of the factors, implications, and methodologies of safety and accident prevention; application of crash prevention programming; implications for transportation safety in the future.

AJP 440 Behavioral Factors in Highway Safety Semester course; 3 hours. 3 credits. • Analyzes behavioral aspects of highway transportation safety, accident causation, and the utilization of behavioral science principles in the modifications of human behavior. Acquaints those involved in traffic safety administration with current safety-related research and its application. Emphasizes the role of stimulants and depressants in crash causation research.

AJP 451 Correctional Administration Semester course; 3 hours. 3 credits. • Reviews the development of theories and practices regarding contemporary correctional administration; various correctional systems are historically traced and evaluated; encompasses both the custodial and treatment functions of all correctional settings, including the jail.

AJP 452 Juvenile Justice Administration Semester course; 3 hours. 3 credits. Analyzes the maintenance of all Juvenile Justice agencies from operational field services to the supportive organizations. Assesses the complex interrelationships among all public and private youth agencies stressing safety as well as referral. Emphasizes the organizational and administrative factors which determine program design and implementation.

AJP 455 Community-Based Correctional Programs Semester course; 3 hours. 3 credits. • A comprehensive review of various community-based rehabilitation and treatment efforts; includes discussions on probation, parole, work release, half-way houses, and other methods of reintegrating the offender into society.

AJP 460 Evaluation and Treatment of the Offender Semester course; 3 hours. 3 credits. • A survey of the issues and procedures involved in evaluating individual differences in offenders and among classes of offenders; current diagnostic and treatment methods are discussed; introduces the student to case analysis and correctional counseling techniques.

AJP 471 Scientific Research and Crime Analysis Semester course; 3 hours. 3 credits. • A comprehensive evaluation of current developments in research, instrumentation, and laboratory technology utilized to detect, identify, analyze, and compare demonstrative evidence; includes discus-

sions on chromatography, spectrography, neutron activation analysis, toxicology, and forensic pathology and psychiatry.

AJP 474/URS 574 Correctional Institution Development and Design Semester course; 3 hours. 3 credits. Prerequisite: Permission of the instructor. • Examines the various concepts, theories, and techniques involved in development of modern correctional treatment processes as they influence the design of correctional institutions, including community-based facilities. Student analyzes current designs and architectural innovations in corrections, with major consideration directed toward the national standards for correctional architecture.

AJP 475 Case Studies in Evidence Semester course; 3 hours. 3 credits. • Analyzes case studies reflecting the supervisory role of the courts over the prosecutorial use of testimonial and non-testimonial evidence; examines by actual cases the judicial interpretive processes by which the public safety is balanced with individual rights.

AJP 480 Seminar: Critical Issues in Criminal Justice Both semesters; 3 hours. 3 credits. • Analyzes contemporary questions relating to policies, goals, and developments throughout criminal justice; includes detailed examinations of vital issues and emerging trends which promise to affect the future. Research papers are to be prepared on selected issues. Required of all majors.

AJP 491 Directed Individual Study Semester course; 3 hours. 3 credits. • Designed to provide an independent research opportunity for the employed adult student who does not require internship experience. Enrollment only upon consent of the department chairman. This course or AJP 390 is required of all majors.

COURSES IN RECREATION

Recreation 301 Recreation Participant Profiles Semester course; 3 hours. 3 credits. • Examination of the socio-economic factors affecting recreation participation; methods for classifying recreation participants; extensive examination of the interrelations among the various socio-economic factors and recreation participation, including an analysis of the methods and techniques of inventorying recreation participation.

Recreation 302 The Economics of Recreation Semester course; 3 hours. 3 credits. • Evaluation of the significance of recreation in the structure and growth of the economy. Particular emphasis is given the economic impact of recreation development from the neighborhood level to the regional level. Analysis of the methods and techniques of determining the economic impact of recreation development. Special consideration is given the benefit-cost approach to determining priorities and allocating resources.

Recreation 321 Recreation Market Analysis Semester course; 3 hours. 3 credits. • Systems of quantitative evaluation of various types of popula-

tions, neighborhoods, and communities for the purpose of determining recreation demands. Methods of determining real differences in recreation resource offerings.

Recreation 331-332 Recreation Site Selection and Development Continuous course; 2 lecture and 4 laboratory hours. 4-4 credits. • First semester: examination of the factors accentuating the demand for recreation planning; the basic procedures involved in the planning process; site-influencing factors affecting potential for recreation development; procedures in preparation of site plans and development plans. Second semester: general principles of planning and development of basic recreation areas and facilities; standards relative to space requirements, location, and programs; trends in recreation site selection and development. See page 45 for laboratory fee.

Recreation 351 Recreation Programming for Pre-School Children Semester course; 3 hours. 3 credits. • Recreation programming for the pre-school child; examination of the methods and techniques of program design, organization, implementation, and evaluation. Exploration of the needs of pre-school children with emphasis on implications for programming. Non-majors only.

Recreation 395 Recreation Program Development Semester course; 3 hours. 3 credits. • Principles of recreation program development; intensive study of the recreation program areas available to participants; analysis of the methods and techniques of program implementation and program evaluation.

Recreation 401 Recreation Internship Summer semester; 6 credits. Prerequisite: senior standing. • The student, in a nine-week program, is assigned on an individualized basis to public, private, and commercial agencies. Opportunities are afforded for the student to gain practical experience under supervision in applying theory and methodology. Total of 315 clock hours required.

Recreation 402 Recreation Administration Semester course; 3 hours. 3 credits. • Principles of the administrative process. Deals with basic procedures of recreation administration, with particular emphasis on programming and budgeting; personnel practices and policies; publicity and public relations; and legal foundations and legislative basis for recreation services.

Recreation 451-452 Municipal and Regional Recreation Continuous course; 3 hours. 3-3 credits. • Examination of the organizational structure and functions of various municipal and regional agencies providing recreation services, including an analysis of methodology of planning and implementing effective programs. Special consideration is given the need to establish effective long-range planning policies.

Recreation 461-462 Recreation Resource Management Continuous course; 3 hours. 3-3 credits. • Examination of concepts, principles, and practices of recreation resource management. Particular emphasis is given to land and facility management. Quantitative and qualitative resource evaluation.

Special consideration is given to methods and techniques for determining management policies.

Recreation 471-472 Recreation in Institutional Setting Continuous course; 3 hours. 3-3 credits. • Examination of recreation services for individuals in various institutional settings. Deals with program planning and implementation, including an analysis of recreation needs of various types of populations.

Recreation 494 Seminar: Public Recreation Semester course; 3 hours. 3 credits. • Advanced seminar in public recreation which analyzes in depth special problem areas and current issues at a variety of scales ranging from neighborhood to regional level. Independent research on special projects.

Recreation 496 Seminar: Recreation Use of Natural Resources Semester course; 3 hours. 3 credits. • Advanced seminar in recreational use of natural resources which analyzes in depth special problem areas and current issues in recreational resource management. Independent research on special projects.

Recreation 498 Seminar: Recreation in Special Settings Semester course; 3 hours. 3 credits. • Advanced seminar in recreation for special settings which analyzes in depth special problem areas and current issues in institutional recreation. Independent research on special projects.

COURSES IN REHABILITATION SERVICES

RES 301 Development of Rehabilitation Potential Semester course; 3 hours. 3 credits. • Provides an understanding of the problems confronting the unemployed and underemployed in achieving maximum employment potential. The particular nature of various problems encountered by such populations is analyzed, in relation to nature of the requirements of employment.

RES 312 Contemporary Rehabilitation Services Semester course; 3 hours. 3 credits. • Role of the rehabilitation worker in the development of human resources. Organization of service delivery systems and community resources. The relationship of rehabilitation services to societal needs. Identification of potential recipients of service.

RES 360 Work Evaluation and Adjustment in Rehabilitation Semester course; 3 hours. 3 credits. • Provides an overview of principles of determining work potential and overcoming maladjustment to work. Characteristics of work environments, assessment of work potential, and contemporary problems of work evaluation and work adjustment in rehabilitation services.

RES 425 Introduction to Rehabilitation Semester course; 3 hours. 3 credits. • This course is designed to give the student a comprehensive overview of the rehabilitation process. It emphasizes the historical, philosophical, social, and legal aspects of rehabilitation. Special attention is devoted to the professional aspects of rehabilitation counseling. The need for

the rehabilitation counseling, and skills and functions of the rehabilitation counselor are also covered.

RES 433 Directed Readings in Rehabilitation Semester course; 1, 2, or 3 hours. 1, 2, or 3 credits. • Provides an opportunity for students to intensify understanding in one or more areas of rehabilitation through directed readings under supervision of a faculty member. The study experience must be synthesized in a paper, and a written or oral examination before a faculty committee must be passed.

RES 439 Current Problems in Rehabilitation Semester course; 3 hours. 3 credits. • A study of developments and implications resulting from rehabilitation research and demonstration activities. Agency problems related to staff improvement and expansion of rehabilitation services and facilities will also be considered as well as reviews of specific disability problems and trends in rehabilitation.

RES 450 Applied Rehabilitation Methods Semester course; 3 hours. 3 credits. • Methods of intervention in rehabilitation, emphasizing the development of interpersonal skills, e.g., communication skills, interviewing techniques.

RES 455 Practicum in Rehabilitation Semester course; 6 hours. 6 credits. • Designed to provide the student opportunities for observation and participation in rehabilitation and related settings. Experiences are systematically related to theoretical concepts. The practicum will consist of a full-time placement for a total of 240 clock hours.

RES 456 Interpretative Processes in Rehabilitation Semester course; 3 hours. 3 credits. • This course is concerned with methodology of collection, analysis, synthesis, and effective utilization of education, social, psychological, vocational, and medical information in the rehabilitation process.

RES 459 A Survey of Rehabilitation of Blind and Visually Impaired Individuals Semester course; 3 hours. 3 credits. • The purpose of this course is to acquaint the student, rehabilitation counselors, and other personnel working in related areas with problems encountered in the rehabilitation of blind and partially sighted persons.

RES 461 Work Evaluation Techniques for Rehabilitation Semester course; 3 hours. 3 credits. • An in-depth examination of the methods and techniques utilized in determining employment potential. The role of the work evaluator in the rehabilitation process. Specific procedures and approaches are analyzed including the TOWER System, Singer-Graflex System and other methods currently utilized in rehabilitation services.

RES 462 Work Adjustment Techniques for Rehabilitation Semester course; 3 hours. 3 credits. An in-depth analysis of methods utilized in overcoming maladaptive worker behavior in rehabilitation services including group process, sheltered workshops, and non-verbal techniques. The role and function of adjustment personnel in the rehabilitation process. Current problems and research in methods of adjustment.

COURSES IN SOCIAL WELFARE

Social Welfare 305 Interventive Methods Semester course; 2 lecture hours. 2 credits. • Study of verbal and non-verbal communication, collection and description of social data, with individuals, groups, and communities.

Social Welfare L305 Interventive Methods Laboratory Semester course; 2 laboratory hours. One credit. • Laboratory for Social Welfare 305; may be taken only concurrently with Social Welfare 305.

Social Welfare 307, 308 Man in Society Semester courses; 3 lecture hours. 3 credits. • Examination of the psychological and societal bases of social functioning. Review of maturation and development through the life cycle as they influence adjustment. Special emphasis on ego psychology. The first semester focuses on individual determinants of social functioning with special emphasis on determinants of social role functioning. The second semester has special emphasis on societal determinants of human behavior.

Social Welfare 321 Development of Social Welfare Semester course; 3 lecture hours. 3 credits. • Review of basic concepts of formal organizations, framework for policy analysis, historical development of social welfare functions and organizations.

Social Welfare 322 Social Welfare Legislation and Services Semester course; 3 lecture hours. 3 credits. • Legislation and budgeting as major processes in the development of Social Welfare policy; policy issues related to income maintenance and social service programs in contemporary America.

Social Welfare 351/Recreation 351 Recreation Programming for Pre-school Children Semester course; 3 hours. 3 credits. • Recreation programming for the pre-school child; examination of the methods and techniques of program design, organization, implementation, and evaluation. Exploration of the needs of pre-school children with emphasis on implications for programming.

Social Welfare 401 Issues in Social Welfare Semester course; 3 lecture hours. 3 credits. • A senior seminar designed to identify issues of concern to students as beginning professionals and to discuss etiology of and options to existing legislation or practice. Students will demonstrate evidence of their ability to analyze issues of their concern with the class.

Social Welfare 403 Social Casework Semester course; 2 lecture hours. 2 credits. • Using ego psychology as a theoretical framework, examines the process of study, diagnosis, treatment and evaluation in social work practice. Emphasis on the casework relationship as a dynamic in helping the client in his problem-solving. Agency function and community resources are stressed. Special emphasis on the resistant or multi-problem client.

Social Welfare L403 Social Casework Laboratory Semester course; 2 laboratory hours. 1 credit. • Laboratory for Social Welfare 403; may be taken only concurrently with Social Welfare 403.

Social Welfare 405 Social Group Work Semester course; 2 lecture hours. 2 credits. • Introduction to dynamics of formal and informal groups. Emphasis on analysis from the perspective of group membership.

Social Welfare L405 Social Group Work Laboratory Semester course; 2 laboratory hours. 1 credit. • Laboratory for Social Welfare 405; may be taken only concurrently with Social Welfare 405.

Social Welfare 406 Social Group Work: Leadership Semester course; 2 lecture hours. 2 credits. • Advanced study of the dynamics of formal and informal groups with emphasis on analysis of group leadership.

Social Welfare L406 Social Group Work: Leadership Laboratory Semester course; 2 laboratory hours. 1 credit. • Laboratory for Social Welfare 405; may be taken only concurrently with Social Welfare 406.

Social Welfare 411-412 Field Work Continuous course; 1 or 2 lecture and 10 or 20 laboratory hours. 3, 6; 3, 6 credits. Prerequisite: permission of the instructor. • Directed practice in a community agency under the supervision of an agency field instructor. The course is intended to develop knowledge, values and beginning practice skills appropriate to entry-level practice in human services agencies. The seminar provides an opportunity to generalize principles beyond the specifics of the particular agency and community.

Social Welfare 413-414 Independent Study Semester courses, 1, 2, 3; 1, 2, 3 credits: Senior standing required. Prerequisite: permission of the instructor. • Under supervision of a faculty advisor, whose consent is required to register, study a topic of concern to the student. Each student must present his findings in writing and pass an open oral examination before a faculty committee of three members.

Social Welfare 422 Social Work in Health Programs Semester course; 3 lecture hours. 3 credits. • Examines the problem of illness as a major social problem. Analyzes the legislation which deals with provision of health services and the service delivery system which has resulted. Identifies the linkages between health and other problem areas, such as poverty. Special emphasis on the role of the social worker in the health delivery system.

Social Welfare 425 Income Maintenance Programs Semester course; 3 lecture hours. 3 credits. • Examines the problem of poverty as a major social problem. Analyzes the legislation which deals with provision of income maintenance services and the service delivery system which has resulted. Identifies the linkages between poverty and other problem areas, such as health and family integrity. Special emphasis on the role of the social worker in the income maintenance programs.

Social Welfare 426 Individual and Family Service Programs Semester course; 3 lecture hours. 3 credits. • Examines the problem of personal and family problems as a major concern of social welfare. Analyzes legislation which deals with such programs and the network of agencies and programs which have developed to serve individuals and families in such areas as personal counseling, adoptions, marital counseling, and problems of the

aged. Special emphasis on the role of the social worker in programs dealing with individual and family dysfunction.

Social Welfare 427 Social Work in Criminal Justice Programs Semester course; 3 lecture hours. 3 credits. • Examines the problem of crime as a major concern of social welfare. Analyzes legislation that deals with the criminal justice system and the network of agencies and programs involved. Special emphasis on the role of the social worker in probation and parole and corrections programs.

Social Welfare 430/Business 430 Social Insurance Semester course; 3 lecture hours. 3 credits. • Societal and individual financial problems encountered as the result of disability, unemployment, aging, and death. Insurance solutions through governmental and private techniques.

Social Welfare 434 Community Organization Semester course; 2 lecture hours. 2 credits. • Examination of community organization as a social work method. Assessment of community dynamics, social goals, and community or agency resources as elements in developing strategies of intervention at the inter-agency or community level. Emphasis on populations identified as powerless in contemporary society.

Social Welfare L434 Community Organization Laboratory Semester course; 2 laboratory hours. 1 credit. • Laboratory for Social Welfare 434; may be taken only concurrently with Social Welfare 434.

Social Welfare 438 Family Dynamics Semester course; 3 lecture hours. 3 credits. • Study of the functions and structure of families as they persist and change in contemporary society. Special emphasis on the dynamics of interaction and communication patterns of dysfunctional families.

Social Welfare 439 Aging in Our Society Semester course; 3 lecture hours. 3 credits. • Personal, social, and cultural aspects of aging in contemporary society. Implications for social welfare of meeting the needs of the aged. Examination of programs which work with aged persons.

Social Welfare 488 Research in Social Welfare Semester course; 3 lecture hours. 3 credits. • Review of current research about social problems and professional practice. Analysis of the assumptions underlying the research goals, methodology, and conclusions. Emphasis on the importance of the practitioner in identifying questions for research from his practice.

Social Welfare 495 Organizational Structure and Management Semester course; 3 lecture hours. 3 credits. Theory and practice of organizational structure and management practice in social welfare agencies. Review of collegial professional norms and their interface with typical bureaucratic organizational norms. Analysis of problems of agency function, inter-agency relationships, agency structure, and organizational roles in social welfare delivery systems.

COURSES IN URBAN STUDIES

Urban Studies 201 Urban Morphology Semester course; 3 lecture and 4 laboratory hours. 5 credits. • A study of the growth and development

of the physical city. The various urban patterns are analyzed to determine the effects of form and design. A laboratory is included to give the student an opportunity to study urban patterns through field exercises and archival research in land use mapping and evaluation. See page 45 for laboratory fee.

Urban Studies 202 Introduction to Housing Semester course; 3 hours. 3 credits. • A general survey of the housing market and cycle forces; the filtering process; special characteristics of real estate; the interdependence of public and private real estate; and urban land acquisition problems.

Urban Studies 302 The Use of Urban Land Semester course; 3 hours. 3 credits. • Land use attitudes in Europe and North America; land use competition; reconciliation of discordant uses by the judiciary; zoning powers and the zoning trio; departures from established ordinances; property rights; aesthetics as a control; regulating land use to the tempo and sequence of growth.

Urban Studies 303 Introduction to Urban Systems Semester course; 3 hours. 3 credits. • Analysis of the various social, economic, governmental, and physical facilities systems of which the urban community is comprised and of the manner in which these various systems interact to give a place its particular personality. Emphasizes the national systems of cities, the significant differences among the various cities, and the forces contributing to their unique problems.

Urban Studies 304 Community Growth and Development Semester course; 3 hours. 3 credits. • A study of the manner in which neighborhoods, communities, cities, and metropolitan regions grow as socio-economic and political units; innercity-suburban development stages; the problems associated with multiple governments; and an evaluation of "optimum city size" and "new towns." Consideration will be given to modern concepts of decentralization.

Urban Studies 313 Urban Research and Field Methods Semester course; 1 lecture and 4 laboratory hours. 3 credits. • Methods of data collection, or organization, and updating; the use of secondary information; applications of elementary statistical analysis and of graphic and cartographic analysis. Permission of instructor required. (See page 45 of catalog for laboratory fee).

Urban Studies 314 Urban Models and Evaluation Procedures Semester course; 1 lecture and 4 laboratory hours. 3 credits. • Examines the development of social and economic indicators and projection techniques. Analyzes the assumptions and applications of simulation, modelling and evaluation procedures. Permission of instructor required. (See page 45 for laboratory fee).

Urban Studies 327 Contemporary Urban Problems Semester course; 3 hours. 3 credits. • A study of urban affairs with particular references to complex urban problems. An inventory will be made of contemporary urban problems and of devices for dealing effectively with them. Special attention

will be given to new concepts, such as multi-jurisdictional planning. (Same as Political Science 327).

Urban Studies 328 Seminar in Urban Problems and Solutions Semester course; 3 hours. 3 credits. Prerequisite: Urban Studies 327 or consent of instructor. • Continuation of Urban Studies 327 with emphasis upon alternative approaches to the amelioration or solution of urban problems. (Same as Political Science 328).

Urban Studies 336 Issues in Environmental Quality Semester course; 3 hours. 3 credits. • Surveys the condition of the urban/metropolitan natural environments. Describes major types of pollution and their principal causes, emphasizing areas of inherent conflict between urban-industrial development and the maintaining of environmental quality. Explores the relationship of environmental issues to other societal values. Evaluates available and existing solutions including their technological, governmental, political, economic and legal aspects.

Urban Studies 337 Urbanization and Blacks: A Cross-Cultural Comparison Semester course; 3 hours. 3 credits. • Comparison and evaluation of past and contemporary urbanization patterns of black people primarily in Africa and America, their current social, economic and political problems, and the range of solutions being proposed for dealing with them. (Same as Afro-American Studies 337).

Urban Studies 361 Principles of Residential Subdivision Semester course; 3 hours. 3 credits. • A study of the design and engineering of residential subdivisions; the function of the land developer; tract evaluation; purchasing and financing; planning the building operation; and the problems confronting the developer.

Urban Studies 397-398 Independent Study Semester course; 2 or 3 hours. 2 or 3 credits. • Under supervision of a faculty advisor, whose consent is required to register, study a topic of concern to the student. Junior or senior standing is required.

Urban Studies 411 Urban Public Policy-Making Processes Semester course; 3 hours. 3 credits. • A study of the dynamics of conflict resolution in behalf of and within the urban community; the manner in which competing interests are articulated and aggregated in attempts to shape urban public policy, the various levels and kinds of governmental machinery designed to resolve the conflicts.

Urban Studies 412 Metropolitan and Regional Public Management Semester course; 3 hours. 3 credits. • Examines the relationship between metropolitan growth and the fragmentation of governmental systems; assesses capacity of fragmented governmental systems to formulate rational public policy in relation to forces impeding or facilitating political integration of a metropolitan area; evaluates mechanisms designed to reduce governmental fragmentation.

Urban Studies 421 Operations of Municipal Agencies Semester course; 3 hours. 3 credits. • A study of the organizational structure of the various

municipal agencies; their missions; the manner in which they operate; and the problems confronting them.

Urban Studies 422 Programming and Budgeting Semester course; 3 hours. 3 credits. • An examination of the manner in which governments determine program priorities and allocate public resources to carry out these programs. Special consideration is made of the need to establish long-term planning policies so that orderly funding can be realized.

Urban Studies 431 Introduction to Urban and Regional Planning Semester course; 3 hours. 3 credits. • Introduction to the history, concepts, and activities of urban planning and their relationship to the ethics and responsibilities of planners.

Urban Studies 432 Problems in Urban and Regional Planning Semester course; 3 hours. 3 credits. • Regional planning concepts. Trends in urbanization and the planning responses.

Urban Studies 451 The Urban Economic Base Semester course; 3 hours. 3 credits. • An examination of the manner in which the urban community is structured as a micro-economy; the requirements for continued economic growth; the urban economic hierarchy; and the differences of economic base development as these are exhibited from place to place. The role of the industrial park and the industrial district; the development of the CBD; the need for labor training as a community response and the role of the planner as an agent of economic development.

Urban Studies 452 Urban Transportation Systems Semester course; 3 hours. 3 credits. • An examination of urban requirements for mobility, transportation systems, problems of traffic, mass transit, and new concepts for moving people and goods.

Urban Studies 461 Public Housing and Urban Renewal Semester course; 3 hours. 3 credits. • A study of the critical shortage of adequate shelter for low income groups; the response of the federal government to these needs; and evaluation of public housing and the Model Cities Program; and the association between homes and jobs.

PART X—SCHOOL OF EDUCATION

WARREN STRANDBERG, Dean

CHARLES RUCK, Associate Dean

RICHARD S. VACCA, Assistant Dean

The School of Education provides professional preparation for students planning to teach in elementary and secondary public schools—with a particular orientation toward urban education. Programs of teacher education combine comprehensive studies in general education with professional preparation and concentration in special fields of study. Field-based activities are basic to all programs in teacher education. Each program is designed to contribute to both the personal and professional development of the prospective teacher.

Degree Programs in Teacher Education

The preparation of teachers is a joint responsibility of staff in both the subject fields and professional education, with curricula planned cooperatively by the various departments and the School of Education. Bachelor of science degrees are awarded in elementary education, distributive education, secondary education, physical education, and special education. Bachelor of fine arts degrees are awarded in art education and theatre education, while bachelor of music education degrees are awarded to those completing requirements in music.

Students fulfilling degree requirements in any one of the fields of study listed above are eligible to receive the collegiate professional certificate

from the Virginia State Department of Education when recommended by the School of Education. This certificate is a five-year renewable certificate which fulfills the basic requirements for teaching in the public schools of Virginia. State teaching scholarships are available for those who will teach at least one year in the public schools of Virginia. For information relating to scholarships or requirements for endorsement for teaching or requirements for renewal of certificates, the prospective student is advised to write or call the dean of the school of education or the Division of Teacher Certification in the Virginia State Department of Education in Richmond.

Undergraduate Departments and Programs:

Elementary Education

- Early Childhood Education (certificate program)
- Elementary Education (B.S. degree)
- Library Science (certificate program)

Health and Physical Education

- Physical Education (B.S. degree)

Secondary/Post Secondary Education

- Distributive Education (B.S. degree)
- Secondary Education (B.S. degree)
 - Biology
 - Chemistry
 - English
 - French
 - History and Social Science
 - Mathematics
 - Physics

Special Education

- Special Education (B.S. degree)

Graduate Degrees: Graduate programs leading to the master of education degree are available in administration and supervision, adult education, biology education, counselor education, elementary education, distributive education, mathematics education, and special education (emotionally disturbed, learning disabilities, and mental retardation). For details see the **Graduate Bulletin** available from the School of Education, Office of Graduate Studies, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284.

Admission and Graduation Requirements

Undergraduate students who are in good standing at Virginia Commonwealth University shall be permitted to transfer as degree-seeking students to programs in teacher education. Students wishing to enter a degree program in teacher education must file an official change of major form with the appropriate degree program wherein degree status is sought. Transfer students accepted for admission to the university are also eligible to enter degree programs in teacher education.

Graduation from a particular degree program in teacher education shall be in accordance with procedures and standards established by the administration and faculty and shall be in accordance with university regulations.

Admission to a degree program in teacher education shall not be construed as a guarantee to graduation or to teacher certification granted by the State Department of Education. The administration and faculty reserve the right to continually evaluate each degree candidate in accordance with standards and regulations established by the administration and faculty, and to refuse graduation from a degree program, as well as to refuse to endorse an individual for state certification, where evaluations indicate an absence of qualities necessary for functioning successfully as a teacher.

In addition to a specified minimum grade-point average, student evaluations will include such criteria as overall performance in the professional education sequence as well as certain behaviors and attitudes thought to be related to success in teaching, as exhibited over the duration of the degree program.

The administration and faculty reserve the right to counsel out of any degree program students whose overall performance in a degree program is deemed unacceptable, or who are convicted of an offense that would effect their successful performance as public school teachers.

Students in teacher education degree programs are expected to complete a minimum of 124 credits and to maintain a minimum of a 2.0 average in all course work attempted. Students failing to meet the latter requirement in the senior year may not be permitted to enroll for student teaching.

Suggested courses of study for various degrees and subject fields will be found under appropriate departmental headings in this catalogue. All students planning to enter teacher preparation programs must register as degree-seeking students.

Approved Programs and Certification Reciprocity

The National Association of State Directors of Teacher Education and Certification (NASDTEC) has established a national system of reciprocity in teacher certification based on successful completion by the candidate of a teacher education program approved on the basis of nationally recognized standards. Over 30 states, including Virginia, have incorporated the standards. All undergraduate degree programs offered by the School of Education have approved program status with the State Department of Education and are thus a part of the NASDTEC Certification Reciprocity System.

SERVICE PROGRAMS

In addition to the degree programs, the School of Education sponsors a number of service programs that are designed to support the degree pro-

grams by providing significant field and research opportunities for School of Education students and to provide meaningful services to the Richmond area community. These service programs include the Reading Center, the Child Study Center, the Adult Learning Center, Project Head Start, The Virginia Teacher Corps Consortium (VTCC), the Career Opportunities Program (COP), and the Vocational Education Resource Materials Center.

The Reading Center has a multiple role. It provides reading improvement instruction for incoming freshmen whose test scores indicate a need for basic skill improvement. This phase of the program is cooperatively supported by the Right to Read Program. In addition the Reading Center performs a service to the community by offering diagnostic and remedial aid to children. Another role is that of giving teachers practical experience in working with children who need diagnosis and remedial assistance. The Reading Center also acts as a materials center for teacher trainees, permitting them to see a variety of instructional and testing materials.

The Child Study Center sponsors three primary services: (1) opportunities for guided activities with children to enhance the professional education of prospective teachers, psychologists, and social workers, with particular emphasis on students in the School of Education; (2) services to the community to supplement the child study services available in local school systems; and (3) provision of a research base for the comprehensive study of children.

The School of Education, in cooperation with the Richmond Adult Basic Education Program, operates two adult learning centers, one on the Medical College of Virginia Campus and the other on the Academic Campus. These modern, well-equipped centers utilize the latest advances in educational technology. Individualized instruction with flexible scheduling is featured. Remedial and enrichment non-credit study programs are offered in a variety of areas to VCU employees and college students.

The Vocational Education Resource Materials Center is the outgrowth of the Distributive Education Learning Resources Center project and offers resource materials and supportive services to vocational teachers throughout Virginia. The Center is staffed by a graduate assistant and can be reached by calling (804) 770-7011.

Project Head Start is an extension of the Office of Child Development, Department of Health, Education and Welfare, Region III. The purpose of Head Start is to improve the health and physical ability of children from low-income families, to develop their ability to relate to others, and to provide social services for their families. Two state training officers give training and technical assistance for 11 full-year and 12 summer Head Start programs.

The Virginia Teacher Corps Consortium is a competency-based teacher education program operated jointly by Virginia Commonwealth University and Virginia State College and funded in two year cycles by the federal government. The VTCC's mission is to prepare teachers via a revitalized field-centered university program (Portal Schools) and the unitizing of

pre-service and in-service teacher education. This process has required an integration of university, schools, and community and the making operational of competency-based teacher education and performance-based continuous progress pupil programming.

The School of Education cooperates with Virginia Union University and the Richmond Public Schools in offering a career opportunities program designed for paraprofessional employees in the public schools. The purpose of this program is to prepare the participants for new careers in education through a program designed to their particular needs. Participants may become fully qualified teachers through the program or may gain the expertise to work at a higher level position as a paraprofessional.

DEPARTMENT OF ELEMENTARY EDUCATION

EVELYN R. FULBRIGHT, Chairman of the Department

Virginia Arnold / Stanley E. Baker / Kenneth Berry / Nancy Boraks
Dolores B. Braxton / Dorothy T. Burton / Jane Cecil
Patricia H. Duncan / Gladys Fleming / Joan Fulton
Jack D. Glover / James O. Hodges / Marvin Kopit / Michael Lahey
Frederic Linder / Bonita J. Madden / Peter Madden / Alice P. McCartha
Joseph Mahony / Barbara Myatt / Guy Rose / Charles C. Sharman
Nyles Strauss / Jean P. Suttentfield / William R. Swyers
John Vandewalle / Earl Williams

The Department of Elementary Education provides pre-service preparation for teachers of children in elementary school. Programs are available which lead to certification in teaching in elementary, early childhood education, and elementary school librarian.

Admission to a degree program in elementary education begins with program planning with an advisor assigned by the department. This advisor-advisee relationship is maintained throughout the period of study at the university. A student and his advisor are expected to play a major role in the development of the student's individual program.

As part of the program-planning process, students have an opportunity to explore, identify, and clarify their personal and professional needs. Individual programs will be based on individual assessment by student and advisor. Each student must complete a program-planning sheet with the advisor, and any changes can be made only with the written consent of the advisor. Programs include specific departmental state certification requirements in the chosen area of specialization.

Student enrolled in the programs are expected to be involved in both on-campus and off-campus activities. Field-based activities are basic to all elementary education programs. Included as clinical experiences are both school and community activities. Teaching and learning in the program will include both directed and independent studies.

Curriculum for Elementary Education, Including Early Childhood Education (B.S.)

English (18 credits required)

Credits

Composition and Rhetoric (101, 102)	6
(201, 202)	6
Children's Literature (350/351)	3
Children's Literature II (428)	3

Social Sciences (15 credits required)

History of Civilization (101, 102)	6
or	
History of Europe (103, 104)	6
American History (201, 202)	6
Economics (201 or 203)	3

Science

General Biology and General Biology Laboratory (101-102 and L101, L102)	8
Survey of Physical Science	3

Mathematics Modern Elementary Mathematics 115, 116 6

Psychology

General Psychology 201	3
Educational Psychology 305	3

Health and Physical Education (6 credits required)

School and Community Health (385)	3
Physical Education for Teachers (390)	3

Art Education Art for Teachers (301) 3

Music Music Education 481 or 487 3

Speech 121 or 408 3

Education 300, 301, 310, 426, 485, 490, 420, 421* 27

98

Program in Elementary Education

Students completing the elementary program will be certified to work with children between the ages of eight-and twelve-years-old. The student learns to help children develop the knowledge, skills, attitudes, and values essential to them throughout their lives.

*Early childhood majors enroll in 415 and 416 instead of 420-421.

Program in Early Childhood Education

Students completing the early childhood program will be certified to work with children between the ages of three-and eight-years-old. The program is directed toward helping children develop positive attitudes towards themselves and their achievements.

Program in Library Science

Students completing the program in library science will learn to help children and teachers develop their abilities to explore ideas, acquire experiences, and formulate and broaden concepts through books and other resource materials.

DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

GEORGE B. DINTIMAN, Chairman of the Department

Edward P. Allen / O'Dean Ampolo / Charlotte M. Birindelli
 Fred M. Browning / Robert G. Davis / Tanya D. Dennis
 Barney R. Groves / George D. Magill / Judith L. Patten
 Jude C. Pennington / Elizabeth S. Royster / Jack H. Schlitz
 Ronald R. Tsuchiya

The Department of Health and Physical Education has as its major responsibilities: (1) the professional preparation of physical education teachers and coaches; (2) the conduct of the service program to meet the university graduation requirement of majors in various areas; and (3) the administration of a broad intramural, extramural, and recreational sports program for all students and faculty.

Curriculum in Health and Physical Education for Men and Women

	<i>Credits</i>
Biology 101-102 and L101, 102; 205-206	16
Economics 203	3
English 101-102; 201-202 or 203-204	12
History 201 or 202	3
Mathematics 113-114 or 113-213	6
Psychology 201; 301 or Education 305	3-6
Social Science Elective	3
General Professional Education 300; 485; 486; 301 or Psychology 305	15-18
Physical Education Activities	
Co-ed from 120, 130, 140, 150, 151, 167, 168 230, 231, 232, 234, 250	9-12
Men only: 133M, 141M, 142M, 233M, 372M, 373M	6-8
Women only: 146W, 160W, 245W, 246W	6
Physical Education 190; 391; 392; 397; 398; 439; 492; 493	23
Health Education 382; 385; 480	9
Electives	12-15

Coeducational

Physical Education 120.	Conditioning	1
Physical Education 130.	Gymnastics I	1
Physical Education 140.	Team Sports I (Softball and Track) ..	2
Physical Education 150, 151, 250.	Beginning, Intermediate Swimming, Lifesaving	1-2
Physical Education 167.	Rhythmics	1
Physical Education 168.	Folk and Square Dance	1
Physical Education 230.	Gymnastics II	1
Physical Education 231.	Gymnastics III (elective)	1
Physical Education 232.	Minor Sports (Tennis, Archery Badminton, Bowling)	2
Physical Education 234.	Golf	1

Men

Physical Education 133M.	Handball, Paddleball, Squash	1
Physical Education 141M.	Team Sports II (Football, Soccer) ..	1
Physical Education 142M.	Team Sports III (Basketball, Volleyball)	1
Physical Education 233M.	Wrestling and Team Handball	1
Physical Education 372M.	Coaching Football and Baseball	2
Physical Education 373M.	Coaching Basketball and Soccer ...	2

Women

Physical Education 146W.	Volleyball, Paddleball, Soccer	1
Physical Education 160W.	Elementary Modern Dance	1
Physical Education 245W.	Hockey	2
Physical Education 246W.	Basketball	2
Physical Education 160.	Elementary Modern Dance	1
Physical Education 168.	Folk and Square Dance	1
Physical Education 235.	Gymnastics I	1
Physical Education 236.	Gymnastics II	1
Physical Education 238.	Golf	1
Physical Education 245.	Hockey	2
Physical Education 246.	Basketball	2

Basic Requirements in Physical Education
(For non-majors.)

Students in various departments who are required to complete four semester hours may elect as many courses as desired after fulfilling the *basic requirement*. Students who are required to take one credit of physical education for graduation should select one of the two courses in AREA I: FOUNDATIONS. Those who are required to complete two or three credits for graduation should select one course from AREA I: FOUNDATIONS and one or two courses from AREA III: INDIVIDUAL AND DUAL SPORTS or AREA IV: RECREATIONAL ACTIVITIES.

Students who are required to complete four credits of physical education should select one course from AREA I: FOUNDATIONS, one course from

AREA III: INDIVIDUAL AND DUAL SPORTS, and two courses from AREA IV: RECREATIONAL ACTIVITIES or AREA V: TEAM SPORTS.

Both men and women are required to purchase a regulation style uniform for participation in the program.

AREA I Foundations 1 lecture and 2 laboratory hours. 1 credit.

Designed to enable the student to understand the physiological, psychological, and sociological foundations of physical activity. Understanding the effect of activity on the human organism and participating in conditioning and motor activities designed to improve fitness and movement skills is the basis of the course.

Physical Education 101 Foundation of Physical Activity

Physical Education 102 Fitness and Weight Control

Area II Restricted Activities 3 laboratory hours. 1 credit.

Students with physical limitations preventing participation in the other areas are advised by the health service office to enroll in restrictive activities. Emphasis is placed on physical conditioning and development of recreation skills within the limitations imposed by the restriction.

Physical Education 103, 204 Restricted Physical Education (Coeducational)

Physical Education 104, 203 Restricted Physical Activity (Coeducational)

AREA III Individual and Dual Sports 3 laboratory hours. 1 credit.

Physical Education 106 Fencing (Coeducational)

Physical Education 107 Badminton (Coeducational)

Physical Education 108 Survey of Gymnastics

Physical Education 109-M Handball, Paddleball, Squash (Men)

Physical Education 111 Self Defense (Coeducational)

Physical Education 112 Tennis (Coeducational)

Physical Education 113 Wrestling (Men)

AREA IV Recreational Activities

Physical Education 114 Bowling (Coeducational)

Physical Education 115 Horsemanship (Coeducational)

Physical Education 116 Archery (Coeducational)

Physical Education 117 Golf

AREA V Team Sports 3 laboratory hours. 1 credit.

Physical Education 125-W Basketball (Women)

Physical Education 126-W Flag Football (Women)

Physical Education 126-M Rugby (Men)

Physical Education 127 Field Hockey

Physical Education 128-M Soccer (Men)

Physical Education 129 Lacrosse

Physical Education 137 Volleyball (Coeducational)

Physical Education 138-M Team Handball (Men)

Physical Education 139 Track and Field

AREA VI Aquatics 3 laboratory hours. 1 credit.

Physical Education 150 Beginning Swimming

Physical Education 151 Intermediate Swimming (Coeducational)

Physical Education 250 Lifesaving (Coeducational)

Physical Education 251 Water Safety Instructors Course (Coeducational)

Physical Education 155 Skin and Scuba (Coeducational)

Physical Education 256 Synchronized Swimming (Coeducational)

Physical Education 258 Aquatic Sports and Games (Men)

Physical Education 356 Organization and Administration of Aquatic Activities (Coeducational)

Physical Education 358 Theory and Technique of Competitive Diving (Coeducational)

AREA VII Dance 3 laboratory hours. 1 credit.

Physical Education 160 Elementary Modern (Coeducational)

Physical Education 163 Elementary Ballet (Coeducational)

Physical Education 165 Fundamentals of Tap Dancing (Coeducational)

Physical Education 168 Folk and Square (Coeducational)

Physical Education 260 Intermediate Modern (Coeducational)

Physical Education 265 Fundamentals of Ballroom Dancing (Coeducational)

Physical Education 360 Advanced Modern (Coeducational)

AREA VIII Experimental Physical Education 3 laboratory hours. 1 credit.

Designed as an elective to provide students with the opportunity to serve as voluntary subjects in studies related to their specific areas of interest and/or difficulties in the general areas of exercise physiology, health problems, health and exercise attitudes, motor learning, and methodologies. Studies are designed to uncover new information through controlled and experimental research as well as provide subjects with valuable insight and understanding.

Physical Education 100 Experimental Physical Education (Coeducational)**Physical Education 200 Experimental Physical Education (Coeducational)****Intramural Athletics**

BARNEY R. GROVES, Director

All undergraduate male and female students registered in the university who are physically eligible may participate in any intramural activity, subject to the approved intramural rules and regulations. The intramural program supplements and complements the required program of physical education as a noninstructional laboratory experience that allows students to pursue formal competition in organized tournaments. Entries are submitted to the intramural office on or prior to the closing entry date for each activity. Both team and individual point and award systems are emphasized. Tournaments are held in the following activities.

Flag Football, Tennis, Handball, Squash, Table Tennis, Basketball, Paddleball, Basketball Freethrow, Badminton, Volleyball, Wrestling, Softball, and Swimming.

DEPARTMENT OF SECONDARY/POST SECONDARY EDUCATION

James W. Bailey / Howard G. Ball / Michael T. Barnes / Frances M. Briggs
 Kay B. Brown / Samuel M. Craver / Vivien K. Ely / Jean M. Epps*
 William F. Goggin / Gerald C. Llewellyn / C. Michael Lohr
 Carroll A. Londoner / Alan M. McLeod / John S. Oehler
 Howard A. Ozman / Ronald H. Sherron / Martin A. Tarter

Program in Secondary Education

The Program in Secondary Education provides pre-service preparation for prospective secondary school teachers. The individual programs meet the Collegiate Professional Certification requirements of the Commonwealth of Virginia. Bachelor of science programs are offered in the liberal arts fields of biology, chemistry, English, French, history and social studies, mathematics, and physics. All professional education courses are taken during the junior and senior years.

*On educational leave.

For bachelors programs in art, theatre, and music see pages 80, 89, and 84, School of Arts; for B.S. program in business see page 215. School of Business; for B.S. programs in distributive education and physical education see pages 282 and 275 under School of Education.

I. B. S. Programs Administered by Secondary Education Program

The B.S. programs in secondary education are provided for qualified students who are interested in teaching in secondary schools. The program is administered by the School of Education in cooperation with departments in the School of Arts and Sciences.

Upon successful completion of requirements and on the recommendation of the School of Education, students can receive a collegiate professional teaching certificate from the Virginia Department of Education.

II. Professional Semester

A. Block Program

The block plan for secondary education in liberal arts areas is divided into two eight-week sessions.

Three professional education courses for nine semester hours credit are taken the first eight weeks, followed by directed student teaching and seminar for six semester hours credit the second eight weeks. Students enrolled in the block program normally carry 15 hours credit. The block program is usually offered both fall and spring semesters.

Students in fields other than those noted above who are planning to teach at the secondary level should communicate with secondary education no later than the beginning of their junior year to assure that the Virginia certification requirements are being met and that the prerequisites to student teaching are included in their programs.

B. Student Teaching

Secondary student teaching is normally completed during an eight-week period of either semester of the final year of study. The student is required to attend a seminar held at the university once a week during the student teaching experience.

III. Additional Requirements Relating to the B.S. Program in History and Social Science Education

No student can student teach unless: (1) the methods courses in secondary social studies are completed in the eight-week period immediately preceding student teaching, (2) a course in the area of educational psychology or human growth and development has been completed, (3) at least 54 hours in approved history and social sciences have been completed. Certificate credit for student teaching will only be given after students complete the one-semester post-student-teaching

session required during the fourth or professional year. (Refer to program outline, page 284.

Persons holding degrees and wishing to do student teaching for a collegiate professional certificate must fulfill the same prerequisites or their equivalent for student teaching that apply to undergraduates. (See above.) The post session courses, however, may be taken for graduate credit.

Curriculum for Biology Education (B.S.)

<i>Courses</i>	<i>Credits</i>
Biology General Biology and General Biology Laboratory 101-102, L101, 102; Biology 201	12
English 101-102; any 200 level series	12
History 201 or 202	3
Sociology 101	3
Mathematics 113-114, or 113-213, or 101-102, or 101-213	6
Psychology 201; 305 or Education 301	6
Physical Education and Health Education	4
Social Science or Humanities Electives. Any approved 300-400 level electives	12
General Professional Education 300; 310 and/or 400; 439, 440, 486	15-25
Chemistry 101-102; 301-302*	16
Physics 201-202*	8
Biology Electives Any approved 200, 300, or 400 level electives designated for majors and must include at least one botany course	20-30
	<hr/> 124

Curriculum for Chemistry Education (B.S.)

<i>Courses</i>	<i>Credits</i>
Biology General Biology and Laboratory	8
English 101-102; Any 200 level series	12
History 201 or 202	3
Mathematics 101-102; 200-201	14
Physics 207-208	8
Sociology 101	3
Psychology 201; 305 or Education 301	6
Physical Education and Health Education	4
Chemistry 101-102 and L101, L102; 301-302 and L301, L302; 202; 303, 304; L304	28-36
Science Electives Biology, Chemistry, Physics, or Mathematics .	6-16
Social Science or Humanities Electives.	
Any Approved 300-400 level electives	12
General Professional Education 300; 310 and/or 400; 439; 440; 486	15-25
	<hr/> 124

*Approved science elective may be substituted

PROGRAM IN DISTRIBUTIVE EDUCATION

The Program in Distributive Education prepares students to become distributive education teacher-coordinators in public school systems.

A DE coordinator's job is stimulating and varied. He deals with many people—students, businessmen, educators, and parents. In many ways, his position is similar to a training director in industry and includes:

- Classroom instruction in subjects relating to marketing and distribution
- Placement of students with businesses on a part-time basis to provide supervised work experience in distributive occupations
- Coordination of student classroom activities with on-the-job training experiences
- Planning, promoting, and administering an adult education program for persons presently employed in distributive occupations
- Because of his close involvement with the business community, the DE coordinator spends only about half of his time in the classroom

All students in the DE program have access to a reference service containing more than 7,000 multi-media holdings primarily related to distributive education.

Curriculum in Distributive Education

	<i>Credits</i>
Mass Communications 181	3
Biology 101-102 or 300; 315; 332 or Chemistry 101-102; 103	8-11
Business 232; 272; 273; 360; 373	15
Economics 203	3
Distributive Education 105-106; 201-202; 302; 405; 406; 413 ..	15
Education 300; 310; 401; 407; 486; 488	21
Electives	12
English 101-102	6
Health Education 385	3
History 201-202	6
Mathematics Elective	3-6
Physical Education Elective	1
Psychology 201; 305	6

English Education Curriculum (B.S.)

The program provides a flexible structure to the professional and academic components, with the first three years largely oriented toward the liberal arts. In the third year, the student is introduced to professional work. It is at this point that he engages in a practicum which introduces him to teaching through paraprofessional activities in secondary schools. The fourth, or professional year is devoted to a synthesis of professional and academic experiences.

The B.S. degree program attempts to maintain compatibility with the B.A. in English. Both programs, for example, require that at least six hours be taken in each of four areas: English literature; American literature; comparative literature; and, linguistics, advanced writing, and criticism. Both also have a foreign language requirement; students in the B.S. program must complete the intermediate year only. For more specific information, copies of a handbook for English education from majors may be obtained from Secondary/Post Secondary Education, or from the English department in the School of Arts and Sciences.

*Program Requirements Prior to Professional Year**Credits*

English, including 101-102	30
Social Science, including American History	12
Laboratory Science	8
Mathematics	6
Physical Education	2
Foreign Language (intermediate course must be taken)	6-12
Electives	21 or 15
Education 300, 310, Health Education 385	9

Professional Year

Education 439, 441, 486, 400	15
Education 301 or Psychology 305	3
English Electives	6
Electives	6
	<hr/>
	124

Curriculum for French Education (B.S.)*Courses**Credits*

Biology	General Biology and Laboratory 101-102 and L101, L102; or General Chemistry 103-104 and L103, L104 or Physical Science 107-108	8
English	101-102; 203-204	12
French	201-202; 301-302; 303-304; 305; Any 400 level courses	27-35
Health Education	385	3
Mathematics	101-102 or 113-114	6
Physical Education	.....	2
History	201-202	6
Second Foreign Language	101-102 or 201-202; 301-302	18
Psychology	201; 305	6
Economics	203	3
Electives	.....	12
General Professional Education	300; 301; 439; 486	18-24

History/Social Science Education Curriculum (B.S.)*

<i>Courses</i>	<i>Credits</i>
History 101-102 or 103-104; 201-202	12
English 101-102; 201-202 or 203-204 or 205-206	12
Laboratory Science Electives (Biology 101-102 and L101, L102 or Chemistry 103-104 and L103, L104 or Physics 107-108) ..	8
Foreign Language Electives 201-202 level**	6
Geography Electives	6
Political Science 201-202	6
Mathematics 101-102 or 113-114	6
History Electives (upper level: see course listings for prerequisites)	12
Physical Education	2
Humanities 200-300 level or History or Approved Social Science Electives 300-400 level	6
Urban Studies or Political Science Electives 300-400 level	6
Economics 201-202	6
Education 300	3
Approved Elective	3
 <i>Fourth Year or Professional Year***</i>	
Education 430; 442; 439; 486	15
Approved Educational Psychology or Human Development Elective	3
Post-Student Teaching Courses	
Education 435 and Approved Professional or Academic Electives	12
	<hr/> 124

Curriculum for Mathematics Education (B.S.)

<i>Courses</i>	<i>Credits</i>
English 101-102; any 200-level sequence	12
Computer Science 201-202	6
History 201 or 202	3
Economics 203 or equivalent	3

*Important: This curriculum provides the student with flexibility in selecting courses. There are, however, some required courses and certain sequences of courses that must be followed to maximize the quality of preparation and fulfill certification requirements. It is important for those anticipating applying for this program to be familiar with the requirements and recommendations. For this information and advice the student should consult with his advisors in the history department and the Department of Secondary/Post Secondary Education.

**The B.S. student must complete the equivalent of the 200 level of a single foreign language. Students who do not qualify by placement test for admission to the second year of language must complete the first and second year of a single language. Such a student will need at least one three-hour course in addition to the above curriculum.

***Education 430, 442, and 439 must be taken in the eight week block immediately preceding the second eight week block of the semester in which your student teaching is planned. Education 435 or 535 and six additional elective hours must be taken the semester after student teaching. The elective in educational psychology or human development must be completed before student teaching, but not necessarily immediately preceding student teaching. The student should not plan to take any additional courses during the student teaching semester.

Credits

Mathematics 107; 200; 201; 202; 211; 310; 401; 405; 309 or Statistics 313 or Statistics 413; Statistics 212, electives	39
University Physics or General Chemistry and Laboratory	8
Science or Mathematical Sciences Electives	6
Physical Education	1
Health Education 385	3
Psychology 201; 305 or Education 301	6
Education 300; 310; 439; 486	16-18
Approved Electives—Must include at least one social science course if Psychology 305 not completed	19-21
	<hr/> 124

Curriculum for Physics Education (B.S.)*Courses**Credits*

Biology General Biology and Laboratory, 101-102, L101-L102 ...	8
Chemistry General Chemistry and Laboratory, 101-102, L101, L102	8
History 201 or 202	3
Mathematics 101-102; 200-201-202;	20
Sociology 101	
Psychology 201; 305 or Education 301	3
Physics 207-208; 331, 337, 320, electives	22-30
Social Science and Humanities Electives, including Science and Mathematics	12
Any Approved 300-400 level electives	12
General Professional Education 300; 310 and/or 400, 439, 440 and 486	15-25
	<hr/> 124

Science Education Curricula

The science education program provides for middle and high school teachers pre-service preparation that meets the Collegiate Professional Certification requirements of the Commonwealth of Virginia. Successful completion of the program from any one of the three major fields in conjunction with the methods and curriculum courses in teaching science usually provides certification in general science as well.

Students in science education are expected to participate in ELSE, Experience Learning in Science Education. This pre-service program involves classroom experience in elementary, middle, and high school environments prior to and concurrent with professional course work. Such service-like activities, studies in school health, and possible involvement in programs such as those at the Richmond Mathematics and Science Center or other innovative science programs are integral parts of Education 439, 440, and/or 310 and 400.

Curriculum for General Science Education (B.S.)

<i>Courses</i>	<i>Credits</i>
Science: General Biology and Laboratory 101-102; L101-L102 ..	8
General Chemistry and Laboratory 101-102,	
L101, L102	8
General Physics and Laboratory 207-208	8
Additional electives in any of the three fields	
or mathematics	28
Mathematics 113-114 or 113 Statistics 213 or 101-102 or	
101 Statistics 213	6
English 101-102; any 200 level series	12
History 201 or 202	3
Sociology 101	3
Psychology 201; 305 or Education 301	6
Physical Education	4
Social Science or Humanities: Any approved 300-400 level	
electives	12
General Professional Education 300; 310 and/or 400; 439,	
440, 486	15-25
<hr/>	
	124

DEPARTMENT OF SPECIAL EDUCATION

RIZPAH L. WELCH, Chairman of the Department

Nancy H. Fallen / Howard G. Garner / Gay Goodman / Ada Hill*

William A. Horn / Valerie Kulesza / Thomas L. Lolley

Phillip J. McLaughlin / Om Datt Parashar / Judith N. Powell / Jody Sands

Robert J. Schoonover

The major objective of the special education department is the establishment of a teacher training program that will prepare individuals to function effectively as highly trained and skilled teachers of exceptional children who are experiencing difficulty functioning in regular academic programs because of their exceptionalities.

In the eight years of its existence, the special education department has experienced widespread growth and development. The offerings of the department have been expanded to include a bachelor's degree in the area of mental retardation and specific endorsement in the areas of emotional disturbance and learning disabilities. The goals of the department are evaluated annually to insure that they are meeting the needs of the Virginia Commonwealth University student population as well as the public school population in the Commonwealth of Virginia.

Upon completion of the program in mental retardation, students will qualify for the Virginia Collegiate Professional Teaching Certificate with endorsement in special education—mental retardation. The Department

*On educational leave.

of Special Education in this university has developed from a philosophy that views special education as an integral part of general education. As such teachers of the mentally retarded need many of the basic competencies of teachers in general education as well as specific preparation for effectively teaching the mentally retarded.

Optionally dual preparation programs in special education—elementary education, and special education—secondary education, can be developed with the approval of the student's advisor and the head of the department involved.

In addition to a highly structured sequence of course offerings, Virginia Commonwealth University is able to provide a variety of practicum sites for majors in the area of mental retardation. Participation and observation should aid students in becoming objective viewers of human behavior and learning effective and comfortable ways of working with children.

In addition to on-campus course offerings and urban practicum settings, students in the special education department have the opportunity of receiving training at the Cooperative University-School Division Special Education Practicum Laboratory in a Rural Setting (Powhatan Project). This site provides opportunities for student teaching experiences, as well as practicum activities.

Humanities

	<i>Credits</i>
English (101-102)	6
Literature (201-202 or 203-204 or 205-206)	6
Speech (408 or 301)	3
Art and Music (Art 301 or Music 481)	6

Social Science

American History (201-202)	6
European History or Western Civilization (101-102 or 103-104)	6
Geography (101)	3
Sociology (101)	3
Economics (201 or 203)	3
Psychology (201 and Educational Psychology 305)	6

Science and Mathematics

Laboratory Science (Biology 101-102 and Laboratories or Chemistry 103-104 and Laboratories)	8
Physical Science (201 or Physics 315 or Education 417)	3
Mathematics (101-102 or 113-114 or 115-116)	6

Health and Physical Education (Health Education 385 and Physical Education 390 and a one credit physical education course)	7
--	---

General Professional Education

Foundations (300)	3
Human Growth and Development (301 or 302)	3
Reading (426)	3
Pupil Evaluation (401 or 468)	3
Curriculum (420 or 437)	3
Literature (350 or 351)	3

Special Education 12

Survey of Special Education (451)	3
Characteristics of the Mentally Retarded (456)	3
Teaching the Mentally Retarded (461)	3
Language Arts for the Mentally Retarded (467)	3

Field Experiences

Junior Practicum, Supervised Teaching, and Advanced Practicum (Education 310 and 487)	9-15
--	------

Electives—One of which is a restricted elective (Arts and Crafts
313; Education 457, 460, 466; Psychology 303, 427)..... 9-15

COURSES IN DISTRIBUTIVE EDUCATION

Distributive Education 105-106 Education for Distribution Semester courses; 1 lecture and 2 laboratory hours. 2-2 credits. • First semester: introduction to the teaching of distributive education. Second semester: organization and administration of local chapters of Distributive Education Clubs of America, national youth organization. Both courses include laboratory experiences in local high schools and on campus.

Distributive Education 201-202 Directed Occupational Experience 120 hours work experience in a distributive business. 2-2 credits. • Students analyze the firm's organization and operation; develop an understanding of the requirement for entering, adjusting, and advancing in a chosen occupational field. Weekly seminar for application of job experiences to the distributive education high school curriculum.

Distributive Education 302 Organization and Administration of Distributive Education Both semesters; 2 lecture and 2 laboratory hours. 3 credits. • Duties and responsibilities, understanding policy, and administering a distributive education program. Laboratory hours take place in area high schools and curriculum laboratory.

Distributive Education 405 Methods of Teaching Distributive Education Both semesters; 2 lecture and 2 laboratory hours. 3 credits. • Techniques of teaching distributive education and unit planning. Scheduled observation experiences and demonstration teaching.

Distributive Education 406, 506 Techniques of Coordination Both semesters; 2 lecture and 2 laboratory hours. 3 credits. • Developing coop-

erative relationship with resources in the community; selecting and developing training stations; placement of students and assisting job adjustment. Observation and field work in coordination activities.

Distributive Education 413, 513 Distributive Education Adult Programs Both semesters; 2 lecture and 2 laboratory hours. 3 credits. • The place of continuing education in the total responsibilities of the teacher-coordinator; planning, organizing, promoting, administering, and evaluating the adult program; selection and training of adult instructors. Observation and experience in adult distributive education classes in an assigned Virginia community.

COURSES IN EDUCATION

Education 300 Foundations of Education 3 lecture hours. 3 credits. • The historical, sociological, and philosophical backgrounds of modern educational theories and practices. The aim of the course is to help the student develop a mature approach to a basic philosophy of education in the modern world.

Education 301 Human Development and Learning 3 credits. • A study of human growth and development; the nature of learning; and observation of children in school and community situations.

Education 302 Child Growth and Development 3 credits. • A study of the growth and development of the child which includes the nature of learning and ways of studying individual children.

Education 310 Supervised Practicum 1-3 credits. • Individually planned observations, tutorials, and small group participation in the schools and other group situations involving children. Includes weekly seminar.

Education 350 Early Childhood Literature 3 credits. • A survey of literature appropriate for nursery, kindergarten, and early elementary school grades. Emphasis will be placed on techniques of storytelling and oral reading.

Education 351 Children's Literature I 3 credits. • Designed to give students an appreciation of values of children's literature; includes biography, fable, myth, traditional and modern fanciful tales, and poetry, as well as a survey of the history of children's literature.

Education 400 Independent Study 1-6 hours. 1-6 credits. • Opportunities are provided for supervised research and independent study in selected areas. Designed for advanced students. All work offered on an individual basis with the approval of instructor concerned and departmental chairman.

Education 401, 501 Pupil Evaluation 3 lecture hours. 3 credits. • Principles and procedures in evaluating pupil growth in skills, attitudes, and understandings; construction and analysis of teacher-made tests; administration of group tests. Interpretation of group and individual tests with emphasis on measurement problems of exceptional children.

Education 402, 502 Guidance 3 lecture hours. 3 credits. • An introductory course for all students in counselor education. Includes a survey of pupil personnel services and places special emphasis on those services associated with the guidance program. The course is designed for both elementary and secondary counselors and is a prerequisite to all other courses offered by the department of counselor education.

Education 403 Guidance for Exceptional Children 3 lecture hours. 3 credits. • Inter-relationships of home, school, and community agencies are explored with emphasis on the special education teacher as a guidance worker in the areas of educational, mental, social, and vocational development.

Education 406 Psychology in the Classroom 3 lecture hours. 3 credits. • An in-service course for classroom teachers. Based on special problems faced by the classroom teacher in testing, reading, speaking, slow learners, emotionally disturbed children, etc.

Education 407 Audio-visual Education 3 credits. • The study and use of audio-visual equipment and aids, and means for using them for more effective presentations to groups.

Education 408 Approach to Mass Media Instruction 3 credits. • Designed to familiarize prospective teachers with possibilities of utilizing available audio-visual equipment and materials. The emphasis will be on relating audio-visual tools to the study of art. Within the course there is present the opportunity to expand the usage of audio-visual equipment beyond that of merely being a communication tool and to utilize these devices in terms of creative expression.

Education 409 TV in the Classroom 3 credits. • Emphasis on classroom utilization of educational television with brief historical and philosophical approach to the concept of ETV. Several sessions in the studio at WCVE-TV.

Education 412 Aerospace Education 3 credits. • A study of the effects of aerospace operations upon social, economic, and political affairs. Emphasis will be placed upon orienting the educator to help his pupils develop an understanding of the technological aspects of the aerospace field. Teachers will have an opportunity to develop resource units for use in their elementary or secondary school classrooms. Opportunity for flight experience will be provided for those interested.

Education 413 Advanced Aerospace Education 3 credits. *Prerequisite:* Education 412. See description for Education 412.

Education 414, 514 Parent-Child Relations 3 credits. • A methods course in parent-child communications and problem solving. Designed to enable parents and parent-educators to understand and relate more effectively with children.

Education 415 Early Childhood Programs 3 credits. *Prerequisites:* Education 300, 302. • The historical and philosophical background of early

childhood education; its organization, functions, and recent developments in programs and activities.

Education 416 Early Childhood Procedures 3 credits. Prerequisites: Education 300, 302. • The application of principles and techniques of teaching in all areas of the curriculum for young children.

Education 417 Teaching Elementary School Science 3 credits. • Emphasis on the methods and techniques used in teaching science in elementary schools. Background material, course content, and modern uses of science will be stressed to broaden understanding in this field.

Education 420 The Elementary School Curriculum 3 credits. Prerequisites: Education 300 and 301 or 302. • The historical and philosophical background of the modern elementary school; its organization, functions, and recent developments in programs and activities.

Education 421 Methods in the Elementary School 3 credits. Prerequisites: Education 300 and 301 or 302. • The application of the principles and techniques of teaching in all areas of child development and learning in the elementary school.

Education 422 Teaching Elementary School Mathematics 3 credits. • Methods and techniques used to teach mathematics in elementary school. Background material, course content, and modern uses of mathematics will be stressed to give the teacher a better understanding of this subject area.

Education 423-424 Modern Mathematics for Elementary Teachers 3-3 credits. • Designed to give elementary teachers a better understanding of principles and concepts in modern mathematics.

Education 425 Teaching Language Arts in Elementary School 3 credits. • A study of teaching techniques and materials for the developmental teaching of oral communication and written expression.

Education 426 The Teaching of Reading 3 credits. Prerequisites: Education 300 and 301 or 302. • A study of the major problems of reading instruction with special attention to the individual's development in reading throughout this elementary school experience.

Education 427 Diagnostic Reading 3 credits. Prerequisite: Education 426. • An investigation of the various levels of ability to be found in the classroom and the techniques and strategies for their evaluation. Emphasis is placed upon evaluation of reading progress, differentiation of instruction, reading difficulties, diagnostic and prescriptive procedures. Students will participate in supervised laboratory experiences.

Education 428 Children's Literature II 3 credits. • An extension of the survey of children's literature with emphasis upon nonfiction, biography, and reference books for children. Experiences are directed toward coordinating fictional and informational literature with the content areas of the elementary curriculum.

Education 429 Movement Education 3 credits. • For teachers of early childhood and elementary education. Emphasis given to the role of movement in the educational program, movement theory and its implications for curriculum and learning. Major consideration will be given to motor development in young children and its implications for positive self-concepts.

Education 430 Teaching in Urban Schools 3 credits. • For teachers and administrators in urban situations; emphasis is given to the development of a variety of techniques for assessing the status of urban children and youth and in translating such information into programs.

Education 431 Creative Teaching in the Elementary School 3 credits. • Designed for early childhood and elementary teachers and administrators. Diversified experiences drawn from various curriculum areas, including the arts. Focus on the creative process and the role of the teacher in fostering creativity.

Education 432 Group and Interpersonal Relations 3 credits. • Utilization of small group interaction as a vehicle to explore techniques and procedures common to human relations study. Focus on the teaching of interpersonal effectiveness, behavior objective identification and development of experiences relevant to leadership, communication skills, decision making, and development in affective or humanistic education.

Education 433 Literature for Adolescents 3 lecture hours. 3 credits. • This course is designed to acquaint the prospective secondary school English teacher with the nature, scope, and uses of adolescent literature. The student is exposed to reading materials designed to meet the varied needs and interests of adolescents in the American high school.

Education 436 The Secondary School 3 lecture hours. 3 credits. • Intensive study of the secondary school and its role and function in American public education with particular attention to problems, trends, and issues.

Education 437 High School Curriculum 3 lecture hours. 3 credits. • A study of the background and objectives of the modern high school; an examination of basic issues and current trends in curriculum construction and revision.

Education 438 High School Methods 3 lecture hours. 3 credits. • The application of principles and techniques of teaching in the high school. Emphases include understanding the adolescent, the learning process, the motivation of learning, and the evaluation of the teaching-learning process.

Education 439 High School Curriculum and Methods 6 lecture hours. 3-6 credits. • Basic issues and current trends in curriculum are integrated with principles and techniques of teaching.

Education 440 Principles and Techniques of Teaching High School Sciences 2 lecture and 3 laboratory hours. 3 credits. Prerequisite: upper division science education major. • A treatment of principles and techniques of teaching high school science. Emphases include philosophy of

science teaching, appropriate learning principles, curriculum innovations, and diverse methods as applied to the field of science. The interrelationship of the sciences will also be stressed.

Education 441 Teaching Secondary School English 3 lecture hours. 3 credits. • Development and organization of English instruction with specific attention to methodology, equipment, materials, and resources.

Education 442 Teaching Social Studies—Secondary 3 lecture hours. 3 credits. • Examines (1) the demands involved in secondary social studies instruction, (2) preparatory approaches to using academic and professional insights in confronting the demands, and (3) the formulation and implementation of appropriate methodological approaches.

Education 444/544 The Middle School Curriculum 3 semester hours; 3 credits. • This course will focus upon an inquiry into the curriculum decision making process as it relates to the education of pre- and early adolescents in the middle school context.

Education 447 Supervised Teaching in Art Education—Elementary and Secondary Both semesters; five days per week for seven weeks at both the elementary and secondary levels 5 credits. Prerequisites: Education 301; Art Education 401, 402. • Classroom experience is offered so that the student may learn to harmonize theory and practice, develop a professional point of view, acquire teaching skills, and gain an understanding of children and how they learn.

Education 448 Supervised Teaching in Art Education 5 credits. See Education 447 above.

Education 449/549 Developmental Reading in Secondary School 3 lecture hours. 3 credits. • This course is designed for prospective and practicing secondary school teachers. The teaching procedures will detail methodology for dealing with a variety of reading situations and factors affecting students in the secondary school. The course takes as its focus the development of reading skills rather than emphasizing remedial reading.

Education 451, 551 Survey of Special Education 3 lecture hours. 3 credits. • For majors and non-majors. An overview of the field of special education, identifying exceptional children, programs, facilities, literature, services, and professional workers. A first course for special education majors.

Education 452, 552 Orientation to Speech Pathology 3 lecture hours. 3 credits. • An introduction to the history, scope, and trends in the field of speech pathology to include terminology systems of classifications and concepts of etiology, diagnosis, and therapy.

Education 456, 556 Characteristics of the Mentally Retarded 3 lecture hours. 3 credits. • Nature and needs of the mentally retarded with emphasis upon the degrees of retardation, causes, and concomitant problems. Psychological bases for a suitable curriculum are also explored.

Education 457, 557 Characteristics of the Emotionally Disturbed 3 lecture hours. 3 credits. • A study of the causes and resultant problems in-

volved in emotional disturbance and the implications for educational management.

Education 460, 560 Teaching the Disadvantaged 3 lecture hours. 3 credits. • Exploration of the nature and needs of disadvantaged children with emphasis on implications for teaching.

Education 461, 561 Teaching the Mentally Retarded 3 lecture hours. 3 credits. Prerequisite: Education 451 or permission of the instructor. • Curriculum development and organization of activities for the mentally retarded at different maturational levels with specific attention to program content, equipment, materials, and resources.

Education 462, 562 Teaching the Emotionally Disturbed 3 lecture hours. 3 credits. Prerequisites: Education 451 and 457. • Curriculum development and organization of activities for the emotionally disturbed, including program content, equipment, materials, and resources.

Education 463, 563 Teaching Slow Learners 3 lecture hours. 3 credits. • Curriculum development and organization of activities for slow learners at different maturational levels with specific attention to program content, materials, resources, and guidance.

Education 464, 564 Teaching the Gifted 3 lecture hours. 3 credits. • Curriculum development and organization of activities for the gifted at different maturational levels with specific attention to program content, materials, resources, and guidance.

Education 466, 566 Remedial Reading 3 lecture hours. 3 credits. • Designed for teachers and others who assist in improving reading efficiency, diagnosis of reading difficulties of all age groups, administration and interpretation of individual reading diagnostic tests, organization of reading instruction for individuals or small groups based upon careful diagnosis; specialized remedial methods presented for severely retarded or non-readers.

Education 467, 567 Language Arts for the Mentally Retarded 3 lecture hours. 3 credits. • A study of the communication problems of the mentally retarded at different maturational levels and techniques for developing appropriate curricular emphasis in the total program.

Education 468, 568 Psycho-Educational Diagnosis of Children 3 lecture hours. 3 credits. • A review of tests used in determining nature and extent of learning deficits and their translation into education methodology for children with specific learning problems. Techniques of remediating learning disorders will be examined and evaluated.

Education 469, 569 Teaching Remedial Arithmetic 3 lecture hours. 3 credits. • For classroom teachers and resource teachers working with children whose arithmetic achievement is significantly lower than grade level placement or expectancy level; designed to attack learning problems in arithmetic at the child's level and to aid teachers in the sequential development of skills and concepts.

Education 471, 571 Medical Aspects of Crippling Conditions 3 lecture hours. 3 credits. • Survey of medical conditions and special health problems as they relate to educational planning and programming. Etiology, prognosis, and effects of disabling conditions are discussed by medical specialists. Teacher-physician relationships are explored. Planning for both the child and his environment to meet his special needs is included.

Education 478 Creative Rhythmic Movement 3 credits. • A study of the importance and place of movement and music in a school program, and the uses of these media in teaching. Emphasis will be placed upon music as an accompaniment for movement and movement as an accompaniment to music. Attention will be given to analysis, improvisation, and creativity.

Education 480, 580 Human Interaction in Teaching 3 lecture hours. 3 credits. • Case-oriented study of affective behavior and its influence on the classroom climate and learning. The content will emerge as the cases are presented and discussed by the participants.

Education 485 Supervised Teaching—Elementary Education 6 credits. Prerequisite: permission of department. • Classroom experience is offered so that the student may learn to harmonize theory and practice, develop a professional point of view, acquire teaching skills, and gain an understanding of children and how they learn. Students will participate in a wide range of school activities.

Education 486 Supervised Teaching—Secondary Education Five days per week for eight weeks. 6 credits. • Classroom teaching experience is provided so that students may learn to harmonize theory and practice, develop a professional point of view, acquire teaching skills and an understanding of adolescents and how they learn. Students will participate in a wide range of school activities.

Education 487 Supervised Teaching—Special Education Five days per week for eight weeks 6 credits. • Classroom experience is offered so that the student may learn to harmonize theory and practice, develop a professional point of view, acquire teaching skills, and gain an understanding of children and how they learn. Students will participate in a wide range of school activities.

Education 488 Supervised Practicum—Advanced 1-3 credits. • Intensive clinical experiences in teaching designed to meet individual student's needs. Includes weekly seminar.

Education 490 Seminar 3 credits. • An elective course for senior education students and other students on approval of the instructor. Discussion of current issues in education.

COURSES IN LIBRARY SCIENCE

See Department of Elementary Education.

Library Science 301 Reference and Bibliography 3 credits. • A study and evaluation of basic reference books and other bibliographical material most frequently used to answer reference questions in a library.

Library Science 302 Library Organization and Administration 3 credits. • A study of fundamental methods, routines, and procedures in the acquisition, preparation, and circulation of books for a small library, with special emphasis on the school library.

Library Science 353 Adolescent Literature 3 credits. • Designed to provide students with a sense of values in adolescent literature on the basis of the cultural and literary values contained in such literature. Special reference is made to a wide range of appropriate literature for adolescent children.

Library Science 401 Cataloguing and Classification 3 credits. • A basic course in cataloging the more common types of library materials. Practice in using the Dewey Decimal Classifications, subject headings, simple filing rules, and the use and adaptation of printed cards and cataloguing aids.

Library Science 402 Non-Book Materials 3 credits. • Classification, selection, preparation, and use of pamphlets, pictures, charts, maps, bulletin boards, films, filmstrips, and other non-book materials. Emphasis placed on coordination of such materials into the library program.

Library Science 430 Services in Special Libraries 3 credits. • An examination of problems, services, and methods involved in organizing and administering special libraries in industry, research laboratories, and educational institutions. Special attention will be given to automation, inter-library cooperation, and information retrieval. Designed for persons already engaged in work in special libraries.

Library Science 454 Practice Librarianship Semester course; 3 credits. Prerequisite: 18 credits of library science or related subjects. • The student is expected to spend 100 or more clock hours in working under supervision in an approved library.

COURSES IN PHYSICAL EDUCATION

These courses are for majors. Courses for non-majors are listed on page 276.

Physical Education 190 Introduction to Physical Education Semester course; 2 lecture hours. 2 credits. • Overview of the professional aspects of physical education in our society, philosophical and scientific principles of physical education, professional organizations and literature, and career possibilities and qualifications.

Physical Education 237 Teaching Gymnastics to Girls Semester course; 3 lecture hours. 3 credits. • Uneven parallel bars, balance beam, free exercise, tumbling, and vaulting. Open only to employed teachers.

Physical Education 372 Theory and Techniques of Coaching Baseball and Basketball Semester course; 2 lecture hours. 2 credits. Prerequisites: Physical Education 140, 141. • Theory and practice of coaching baseball and basketball, particularly at the high school level.

Physical Education 373 Theory and Techniques of Coaching Football and Wrestling Semester course; 2 lecture hours. 2 credits. Prerequisites: Physical Education 140, 233. • Theory and practice of coaching football and wrestling, particularly at the high school level.

Physical Education 374 Theory and Techniques of Coaching Tennis, Gymnastics, Swimming, and Golf Semester course; 2 lecture hours. 2 credits. Prerequisite: Physical Education 151 or 250, 231, 232, 234. • Theory and practice of coaching tennis, gymnastics, swimming, and golf, particularly at the high school level.

Physical Education 375 Theory and Techniques of Coaching Soccer, Track and Field Semester course; 2 lecture hours. 2 credits. Prerequisites: Physical Education 140, 141. • Theory and practice of coaching soccer and track and field, particularly at the high school level.

Physical Education 390 Teaching Physical Education for Elementary Teachers Semester course; 2 lecture and 2 laboratory hours. 3 credits. • Methods and curriculum planning in physical education for the elementary school classroom teacher and physical education specialist. Included are analysis of movement, games, and activities suitable for the elementary school child.

Physical Education 391 Teaching Physical Education in the Elementary Schools Semester course; 2 lecture and 2 laboratory hours. 3 credits. • Designed to enhance knowledge of elementary physical education through an analysis of the aims, goals, objectives, programs, and teaching methods. Construction of year-round curriculum and daily lesson plans. Emphasis also placed upon the acquisition of administrative and organizational knowledge dealing with facilities, equipment, teaching aids, testing, measurement, and safety.

Physical Education 392 Kinesiology Semester course; 3 lecture hours. 3 credits. Prerequisite: Biology 206 or permission of instructor. • A study of the anatomical, physiological, and physical aspects of human motion with application to the analysis of physical activities.

Physical Education 397 Methods in Health and Physical Education Semester course; 2 lecture and 2 laboratory hours. 3 credits. • Methods, materials, techniques, and skills in teaching secondary physical education.

Physical Education 398 Curriculum in Physical Education Semester course; 3 lecture hours. 3 credits. • Curriculum planning for secondary school physical education programs.

Physical Education 407 Secondary School Physical Education Activities Semester course; 3 lecture hours. 3 credits. • A presentation of a progressive gymnastic program of tumbling, stunts, gym horse, parallel bars, horizontal bar, and trampoline. Emphasis will be placed on methods and techniques of teaching, apparatus and tumbling in secondary schools. Participation on equipment will be desirable but voluntary.

Physical Education 411 Problems of Coaching (Basketball) Semester course; 3 lecture hours. 3 credits. • An intensive study of problems involved

in coaching major sports in the secondary school. Emphasis will be placed on practical aspects of organization, administration, and techniques required for successful coaching. This course is designed to meet the needs of personnel already involved in coaching.

Physical Education 412 Problems of Coaching (Football) Semester course; 3 lecture hours. 3 credits. • An intensive study of problems involved in coaching major sports in the secondary school. Emphasis will be placed on practical aspects of organization, administration, and techniques required for successful coaching. Designed to meet the needs of personnel already involved in coaching.

Physical Education 430 Seminar in Gymnastics for Teachers Semester course; 2 lecture and 2 laboratory hours. 3 credits. Elective. Prerequisite: teaching experience in the field or permission of instructor. • Designed to cover all facets of a gymnastic program from the typical physical education class to varsity coaching.

Physical Education 439 The Organization, Administration, and Supervision of the Intramural Sports Program Semester course; 2 lecture and 2 laboratory hours. 3 credits. • Experiences in the organization and administration of an intramural sports program. Lecture will be devoted to the theory, philosophy, history, and plans for the conduct of an intramural sports program. Laboratory experience will be obtained by working in intramural programs.

Physical Education 477 Psychology of Coaching Semester course; 3 lecture hours. 3 credits. Prerequisite: completion of two coaching theory courses or permission of instructor. • Psychological basis of athletic coaching with emphasis upon the factors affecting the teaching and learning of athletic skills. Review and analysis of appropriate research findings in the area of motor learning. Study of the problems of coaching at the secondary and college level.

Physical Education 492 Physiology of Exercise Semester course; 3 lecture and 1 laboratory hour. 3 credits. Prerequisite: Biology 206. • Physiological changes in the human organism resulting from exercise. Investigation of recent research in diet, drugs, fatigue, cardiovascular/respiratory fitness, conditioning programs for various age groups, and the effects of exercise upon various components of physical fitness and health. Application of specific problems to physical education programs. Laboratory experience in the use of research instruments in exercise physiology and completion of four group and two individual studies required.

Physical Education 493 Tests and Measurement in Health and Physical Education Semester course; 3 lecture hours. 3 credits. Prerequisites: Mathematics 113 or 114, Psychology 305. • Selecting, administering, scoring, and evaluating tests in the areas of general motor ability, physical fitness, anthropometrics, motor educability, specialized skills, and knowledge tests. Scientific test construction and basic statistical analysis. Application of competencies demonstrated by completion of project requiring the administration and evaluation of one or more tests, review of the literature, analysis of data, and presentation of conclusions and recommendations.

Physical Education 495 Adaptive and Corrective Physical Education Semester course; 3 lecture hours. 3 credits. Prerequisite: Physical Education 492. • A course designed to provide physical educators with methods of teaching and program planning for students with either temporary or permanent physical disabilities with emphasis on kinds and degrees of anatomical and physiological limitations.

COURSES IN HEALTH EDUCATION

Health Education 325 Treatment of Athletic Injuries Semester course; 2 lecture and 1 laboratory hour. 2 credits. Elective. Prerequisite: Biology 205. • Theory and techniques for the prevention, recognition, referral, and follow-up care of injuries in physical education and athletics.

Health Education 380 First Aid and Accident Prevention Semester course; 2 lecture hours. 2 credits. • Standard and advanced Red Cross first aid course designed for students in teacher preparation program other than physical education.

Health Education 382 Driver Education Semester course; 3 lecture hours. 3 credits. Prerequisite: driving license. • Classroom instruction combined with road training and teaching of driving to beginners. The essential facts, rules, regulations, skills, and attitudes for good driving.

Health Education 385 School Health Semester course; 3 lecture hours. 3 credits. • The role of the classroom teacher in the school health program.

Health Education 386 Community Health Semester course on alternate year basis; 3 lecture hours. 3 credits. • The function of health organizations as they relate to each other and to the community.

Health Education 480 Safety Education and First Aid Semester course; 3 lecture hours. 3 credits. • Designed to show the hazards of, to develop wholesome attitudes toward, and to impart knowledge concerning the safety aspects of all areas of activity in the home, school, and community. Standard and advanced Red Cross first aid requirements are also incorporated into this course.

Health Education 487 Health Problems Semester course; 3 lecture hours. 3 credits. • A study of health problems, with emphasis on preventive measures.

PART XI—CURRICULUM IN ENGINEERING

C. A. B. FOSTER, Coordinator

John E. Griffin, Jr. / Juan F. Linares

For the 1974-1975 session, no freshmen are being admitted to the Curriculum in Engineering and the first-year engineering courses will not be taught.

The second-year courses will be taught for the last time this session and the Curriculum in Engineering will not be available after June, 1975.

The Curriculum

		<i>Credits</i>	
		<i>1st Sem.</i>	<i>2nd Sem.</i>
<i>Second Year</i>			
Engineering 201.	Statics	3	—
Engineering 202.	Dynamics	—	3
Engineering 204.	Mechanics of Deformable Solids	—	3
Engineering 207.	Engineering Economy	2	—
Engineering 210.	Principles of Electrical Engineering ..	—	5
Mathematics 202.	Calculus and Analytic Geometry	4	—
Mathematics 301.	Differential Equations	—	3
Physics 208, 307.	University Physics	4	4
Approved Electives	.....	6	—
		19	18

COURSES IN ENGINEERING

Engineering 201 Statics Semester course; 3 lecture hours. 3 credits. Prerequisite: Physics 207. Corequisite: Mathematics 202. • Engineering mechanics concerning the vector treatment of concepts of force, mass, space; gravitational systems of measurements; equilibrium of force systems; centroids; moments of inertia; dry friction; trusses and frames; internal equilibrium of members and assemblies.

Engineering 202 Dynamics Semester course; 3 lecture hours. 3 credits. Prerequisites: Engineering 201, Mathematics 202. • A continuation of Engineering 201 covering planar and three-dimensional kinematics and kinetics of particles and rigid bodies, including relative motion; Newton's Laws; work and energy; impulse and momentum; vibration.

Engineering 204 Mechanics of Deformable Solids Semester course; 3 lecture hours. 3 credits. Prerequisite: Engineering 201. • Introductory mechanics of continuous media; concepts of stress, fatigue, material properties; stress and deformation caused by axial load, shear, torsion, bending and combined loading; boundary value problems; singularity functions; principal biaxial stress; failure theories; instability; buckling; Euler's column theory; tangent modulus concept.

Engineering 207 Engineering Economy Semester course; 2 lecture hours. 2 credits. • Methods and techniques for evaluating the worth and cost of engineering projects and systems using the time value of money approach. Economic analysis of alternatives.

Engineering 210 Principles of Electrical Engineering Semester course; 5 lecture hours. 5 credits. Corequisite: Mathematics 301. Prerequisite: Physics 208. • Electrical units, circuit elements, instruments, laws. Fundamentals of electrical engineering with emphasis on circuit analysis; transients; phasors; introduction to electronics, transformers, machinery.

PART XII—SCHOOL OF SOCIAL WORK

ELAINE Z. ROTHENBERG, Dean

SIDNEY M. CLEARFIELD, Assistant Dean

William C. Albert / John C. Baird / Alice L. Barber / Thomas O. Carlton
Edward M. Carpenter / H. Otto Dahlke / Willie J. Dell / David C. Forbes
McDonald Franklin / Grace E. Harris / Charles Itzkovitz / Lucie J. Johnson
Wayne L. Johnston / Jean B. Jones / Virous W. Jones / George T. Kalif
Thomas L. Keenan / Michael S. Kolevzon / Lionel C. Lane
Terry M. Madison / Sandra T. Mitchell / Anne M. Montague
Thomas J. Powell / Frances B. Raphael / Dojelo C. Russell
David N. Saunders / Mary Schreiber / Charlotte S. Schriberg
C. Bernard Scotch / Florence Segal / Emanuel Tropp / Ruby C. Walker
Kenneth R. Wedel / Mabel G. Wells

The School of Social Work offers a two-year graduate professional curriculum for social work leading to the degree of master of social work. Additional programs are available to selected groups of students. These programs include a work-study program for employed social workers, a one-year program for selected graduates of approved and/or accredited undergraduate programs in social work, a cooperative program with the Presbyterian School of Christian Education, as well as part-time courses, continuing education, institutes, and workshops.

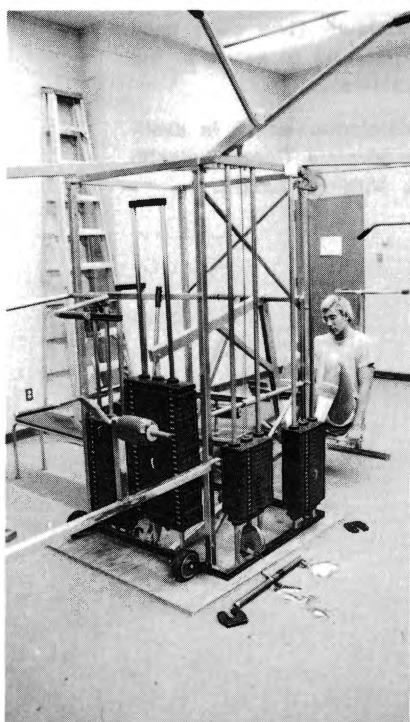
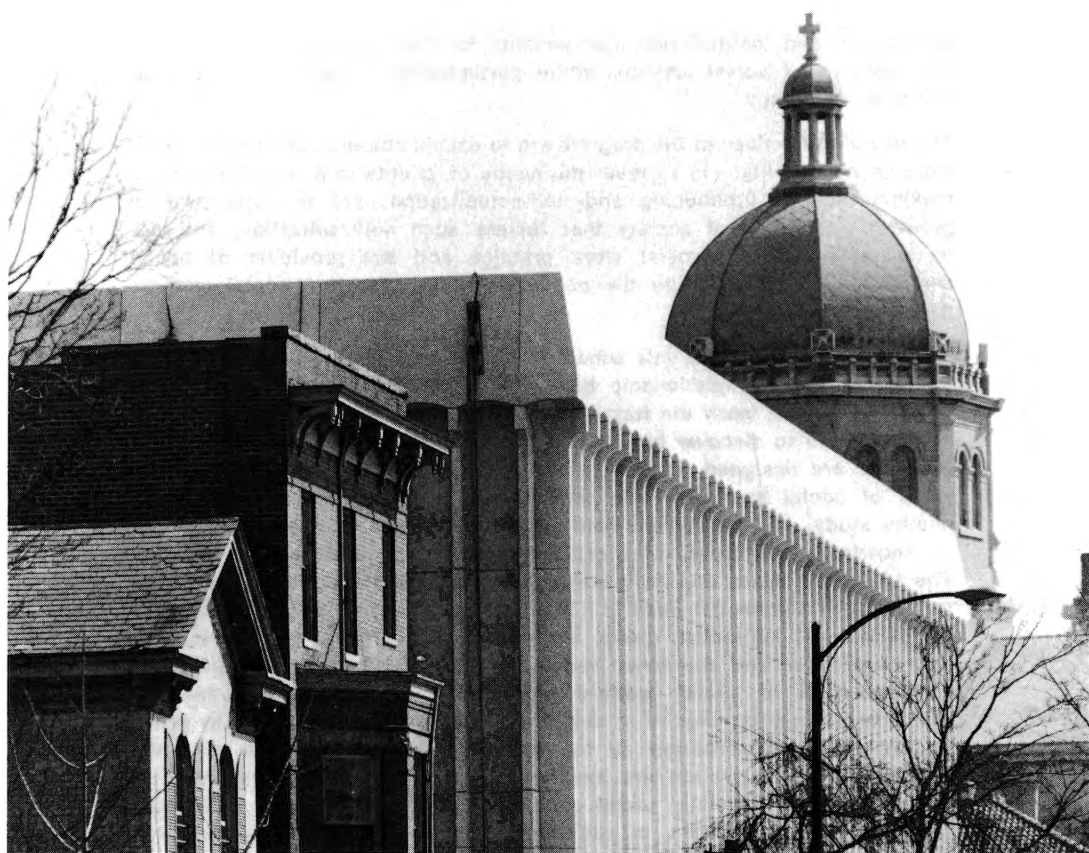
This school sees social work activity as ultimately addressed to the improvement of social functioning and the enhancement of individual identity. This is realized through a constellation of characteristic methods,

knowledge, and institutional arrangements for the planning, administering, and delivery of social services while participating in positive social and institutional change.

The overall objectives of the program are to enable students to become social workers with ability: (1) to meet the needs of clients in a way that fosters maximum social functioning and self-actualization; (2) to participate in promoting the kind of society that fosters such self-realization; and (3) to examine critically social work practice and the provision of social services with dedication to the people and purposes that social workers serve.

Social work education at this school is highly individualized and is characterized by a close relationship between faculty and student. The faculty helps the student learn the form and method of social work practice as he is encouraged to discover his own unique style of helping. The educational programs are designed to prepare students for practice in many different kinds of social agencies. The combination of classroom courses, community study, and concurrent field work experiences facilitates integration of knowledge, attitudes, and skills necessary for professional practice. The integrated class and field curriculum offers opportunities for students to acquire a substantial base in (1) methods of social work practice, (2) the patterns of individual, group, and community behavior as they interact with each other and the social milieu, (3) the development, organization, and operation of social welfare programs and policies, and (4) the methods of scientific inquiry in social work. Students are required to select a method of concentration as the focus of their educational program. Methods of concentration are available in administration, community organization-social planning, social casework, social group work, and social work educator preparation. In addition to the basic required program, students have the opportunity to elect courses reflective of their areas of interest and career goals. A concurrent field practicum (two days each week except during community study course) is required to assist in the student's preparation for responsible social work practice.

The School of Social Work publishes a separate catalogue, which is available on request from the School of Social Work, Virginia Commonwealth University, 901 West Franklin Street, Richmond, Virginia 23284.



PART XIII—BOARD, ADMINISTRATION, AND FACULTY

BOARD OF VISITORS / Appointed by the Governor of the Commonwealth of Virginia

Wyndham B. Blanton, Jr., B.A., M.D., M.S.	Richmond
Rector	
Virginus Dabney, B.A., M.A.	Richmond
Owen Gwathmey, B.A., M.D.	Aylett
C. Coleman McGehee, B.S.	Richmond
Herbert N. Morgan, J.D.	Arlington
G. William Norris, B.S.	Richmond
Richard D. Obenshain, B.A., LL.B.	Richmond
Secretary	
Mrs. David E. Satterfield, III, B.S.	Richmond
S. Buford Scott, B.A.	Richmond
Vice Rector	
James L. Seaborn, Jr., B.S.	Richmond
James E. Sheffield, B.A., LL.B.	Richmond
Stuart Shumate, B.S.	Richmond
Mrs. Robert M. Stone, Jr., B.S., M.Ed.	Roanoke
H. Nathaniel Taylor, A.B.	Richmond
Mrs. Charles G. Thalheimer, B.A.	Richmond

UNIVERSITY ADMINISTRATION

Warren W. Brandt, B.S., Ph.D.	<i>President</i>
Francis J. Brooke, B.A., M.A., Ph.D.	<i>Provost, Academic Division</i>

M. Pinson Neal, Jr., A.B., B.S., M.D.	<i>Provost, Health Sciences Division</i>
H. I. Willett, B.A., M.A., LL.D., Litt.D.	<i>Consultant to the President</i>
John Andrako, B.S., M.S., Ph.D.	<i>Assistant Vice-President for Health Sciences</i>
Arnold P. Fleshood, B.A., M.S., Ed.D.	<i>Assistant Vice-President for Academic Affairs</i>
Wayne C. Hall, B.A., M.S., Ph.D.	<i>Vice-President for Academic Affairs</i>
Raymond T. Holmes, Jr., B.S., M.S., CPA.	<i>Vice-President for Finance</i>
John F. Imirie, Jr., B.S., M.S.	<i>Vice-President for MCV Hospitals</i>
John J. Salley, D.D.S., Ph.D.	<i>Associate Vice-President for Research and Graduate Affairs</i>
Howard L. Sparks, A.B., M.A., Ed.D.	<i>Associate Vice-President for Continuing Education</i>
T. Edward Temple, B.S., M.Ed.	<i>Vice-President for Development and University Relations</i>
Richard I. Wilson, B.A., M.A., Ed.D.	<i>Vice-President for Student Affairs</i>
Lauren A. Woods, B.A., M.D., Ph.D.	<i>Vice-President for Health Sciences</i>

ACADEMIC DEANS

Herbert J. Burgart, B.S., M.Ed., Ed.D.	<i>Dean, School of the Arts</i>
Murry N. DePillars, B.A., M.A.	<i>Assistant Dean, School of the Arts</i>
Robert F. Hester, B.S., M.A.	<i>Assistant Dean, School of the Arts</i>
Paul D. Minton, B.S., M.S., Ph.D.	<i>Dean, School of Arts and Sciences</i>
John H. Borgard, A.B., M.A., Ph.D.	<i>Assistant Dean, School of Arts and Sciences</i>
Lewis C. Goldstein, B.S., M.S., Ph.D.	<i>Assistant Dean, School of Arts and Sciences</i>
J. Curtis Hall, A.B., M.S., Ed.D.	<i>Dean, School of Business</i>
John D. Lambert, B.S., M.S., Ph.D.	<i>Assistant Dean, School of Business</i>
Robert N. Sheffield, B.S., M.S.	<i>Assistant Dean, School of Business</i>
Harland W. Westermann, B.A., M.A., Ph.D.	<i>Dean, School of Community Services</i>
David L. Ames, B.A., M.A., Ph.D.	<i>Associate Dean, School of Community Services</i>
George R. Jarrell, B.S., M.R.C., Ph.D.	<i>Assistant Dean, School of Community Services</i>
Warren D. Strandberg, B.A., M.A., Ph.D.	<i>Dean, School of Education</i>
Richard S. Vacca A.B., M.S., Ed.D. ..	<i>Assistant Dean, School of Education</i>
Elaine Z. Rothenberg, A.B., M.S.S.	<i>Dean, School of Social Work</i>
Sidney M. Clearfield, B.S., M.S.W., D.S.W.	<i>Assistant Dean, School of Social Work</i>
John A. Mapp, B.A., M.A.	<i>Dean of the Evening College and Summer Sessions</i>

UNIVERSITY SERVICES

Harold E. Boling	<i>University Registrar</i>
W. Carter Childress	<i>Treasurer</i>
Martha B. Conway, LL.B.	<i>Administrator of Research Grants and Contracts</i>
James L. Dunn, B.S., M.S.	<i>Assistant Director of Development and Director of Alumni Activities</i>
William O. Edwards, B.A., M.A.	<i>Director of University Relations</i>
Richard E. Grove, B.S., M.A., Ph.D.	<i>Director of University Computing Activities</i>
Timothy L. Langston, B.S., M.S., Ed.D.	<i>Dean of Student Services</i>
Walter P. Lossing, B.A., M.B.A.	<i>Comptroller</i>
Alfred T. Matthews, B.A., M.A., Ph.D.	<i>Dean of Student Life</i>
Phyllis L. Mable, B.S., M.S.	<i>Associate Dean of Student Life</i>
Gerard B. McCabe, B.A., A.M.L.S.	<i>Director of University Libraries</i>
Donald C. Moore	<i>Director of Auxiliary Enterprises and University Services</i>
Stephen Moore, B.S.	<i>Director of University Personnel</i>
Roger L. Smith, A.B., M.S., Ph.D.	<i>Director of Institutional Research and Planning</i>
Joann Spitler, A.B., M.C.	<i>Manager of University Publications</i>
Ralph M. Ware, Jr., B.S.	<i>Director of Development</i>

ACADEMIC CAMPUS SERVICES

James M. Alessio, B.S.	<i>Director of Registration</i>
Edwin E. Blanks, B.S., M.A.	<i>Director of Computer Center</i>
John D. Call, B.S., M.S., M.D.	<i>Academic Campus Physician</i>
Manfred Call, III, B.S., M.S., M.D.	<i>Academic Campus Physician</i>
William J. Cosby	<i>Chief Accountant</i>
Corrine S. Cowardin, B.S., M.S.	<i>Assistant Dean, Student Services</i>
Charles A. B. Foster, B.S., M.S.	<i>Coordinator, Curriculum in Engineering</i>
Bernard C. Furman, Jr., B.S.	<i>Personnel Officer, Academic Campus</i>
Jane Bell Gladding, B.A., M.S.	<i>Associate Dean, Student Life</i>
James J. Krolík, B.S., M.A.	<i>Director, Career Planning and Placement</i>
Jerrie Johnson, B.S., M.S.	<i>Director, Admissions</i>
Stephen Lenton, B.A.	<i>Assistant Dean, Student Life</i>
Phyllis L. Mable, B.S., M.Ed.	<i>Associate Dean, Student Services</i>
James E. McDowell, B.S.C.	<i>Bookstore Manager</i>
Osborne B. Parker, B.S., M.S., Ed.D.	<i>Director, Counseling Center</i>
F. Dana Payne, B.A.	<i>Director of General Studies</i>
Ellen D. Pearson, B.S.	<i>Director, Student Financial Aid</i>
Elizabeth A. Rebich, B.S., R.N.	<i>Head Nurse, Academic Campus</i>
Merle V. Slater, B.S., M.A., M.A.Ed.	<i>Director, Academic Records</i>
Gary G. Schasiepen, Dip.	<i>Systems Analyst, Registrar's Office</i>
Merald E. Thomas, Jr., B.A.	<i>Director of Scheduling</i>
Earl Wheatfall, B.A., M.A.	<i>Director, Special Services</i>

INSTRUCTIONAL STAFF (1973-1974)

The date after each name indicates year of appointment.

- ABDELSAMAD, MOUSTAFA H. (1968) *Associate Professor of Business Administration*
B.Com., Cairo University; M.B.A., D.B.A., George Washington University.
- ADKISON, H. LEON, JR. (1970) *Assistant Professor of Information Systems*
B.S., M.S., Ph.D., Texas Christian University.
- ALBERT, WILLIAM C. (1973) *Assistant Professor Social Welfare/ Social Work*
B.A., Eastern Washington State College; M.S.W., University of Washington; D.S.W., University of Southern California.
- ALDERMAN, JERRY L. (1971) *Assistant Professor of Physics*
B.S., University of Florida; M.S., University of Washington; Ph.D., George Washington University.
- ALLAN, RICHARD E. (1972) *Associate Professor of Mathematical Sciences*
B.S., Samford University; M.A., University of Alabama; Ph.D., George Peabody College.
- ALLEN, EDWARD P. (1950) *Associate Professor of Physical Education*
B.S., Rhode Island State College; M.Ed., Boston University.
- AMES, DAVID L. (1971) *Associate Professor of Urban Studies and Associate Dean, School of Community Services*
B.A., M.A., George Washington University; Ph.D., Clark University.
- AMPOLO, O'DEAN (1967) *Instructor in Physical Education*
B.S., Virginia Commonwealth University.
- APGAR, NICHOLAS A. (1962) *Associate Professor of Communication Arts and Design*
B.F.A., M.F.A., Syracuse University.
- ARMOUR, ROBERT A. (1963) *Associate Professor of English*
B.A., Randolph-Macon College; M.A., Vanderbilt University; Ph.D., University of Georgia.
- ARMSTRONG, JANET (1973)*** *Instructor of Social Welfare*
B.S., M.S.W., Virginia Commonwealth University.
- ARRINGTON, DALE E. (1969) *Assistant Professor of Chemistry*
B.S., University of Washington; Ph.D., University of Kansas.
- ASKEW, RICHARD B. (1972)*** *Instructor in Theatre*
B.F.A., Richmond Professional Institute.

- AUERBACH, STEPHEN M. (1973) *Assistant Professor of Psychology*
B.A., Queens College (CUNY); M.S., Ph.D., Florida State University.
- AUSTIN, ROBERT J. (1972) *Instructor in Political Science*
B.A., M.A., University of Virginia.
- AYRES, EMMY-LOU W. (1972)*** *Instructor in Interior Design*
B.S., Russell Sage College; B.F.A., Richmond Professional Institute.
- AYRES, RAY M. (1969)** *Assistant Professor of Business*
and Director, Management Center
B.S., M.S., Virginia Commonwealth University.
- BACHMANN, JOHN A. (1970) *Assistant Professor of Management*
B.S., M.S., Ph.D., Virginia Polytechnic Institute and State University.
- BAILEY, JAMES W. (1964) *Professor of Education*
A.B., Cornell College; B.D., Garrett Theological Seminary; M.Ed.,
University of Chicago.
- BAILEY, KENT G. (1968) *Associate Professor of Psychology*
B.A., Emory and Henry College; M.S., Virginia Commonwealth Uni-
versity; Ph.D., University of West Virginia.
- BAILEY, LARRY P. (1969)** *Assistant Professor of Accounting*
B.S., Concord College; M.B.A., University of Pennsylvania; CPA.
- BAIRD, JOHN C. (1973) *Associate Professor of Social Work*
A.B., Oberlin College; M.S.W., University of Chicago; Ph.D., Case
Western Reserve University.
- BAKER, STANLEY E. (1971)** *Instructor in Education*
A.B., Virginia Union University; M.A., Columbia University
- BALL, HOWARD GEORGE (1969) *Assistant Professor of Secondary/*
Post-Secondary Education
B.B.A., M.S., Ph.D., University of Wisconsin.
- BALL, JOHN W. (1972) *Instructor in Education*
(Learning Resources Center)
B.S., Virginia Commonwealth University.
- BARBER, ALICE L. (1964) *Associate Professor of Social Work*
B.A., Southeastern Louisiana College; M.S.W., Tulane University
School of Social Work.
- BARKER, ROBERT C. (1966)*** *Instructor in Music*
B.A., M.M., Yale School of Music.
- BARNES, MICHAEL T. (1971) *Instructor in Education*
(Learning Resources Center)
B.S., M.S., Virginia Commonwealth University.

**On educational leave

***Part-time

- BASS, ROBERT G. (1962) *Professor of Chemistry*
B.S., Virginia Polytechnic Institute and State University; Ph.D.,
University of Virginia.
- BATTY, L. WAYNE (1949) *Professor of Music*
B.M.Ed., Illinois Wesleyan University; B.M., Kansas City Conserva-
tory; M.M., Chicago Musical College.
- BAYLISS, J. TEMPLE (1967)** *Assistant Professor of Physics*
B.A., Bowdoin College; Ph.D., University of Virginia.
- BAYLISS MARY-LYNN S. (1968) *Assistant Professor of English*
A.B., Mount Holyoke College; D.P., University of St. Andrews
(Scotland); M.A., Ph.D., University of Tennessee.
- BEACHAM, E. WALTON (1973) *Assistant Professor of English*
B.S., Georgia Institute of Technology; B.A., Georgia State University;
M.A., M.F.A., University of Arkansas.
- BEALE, ANDREW V. (1969) *Assistant Professor of Education*
A.B., M.S., University of North Carolina; Ed.D., University of Vir-
ginia.
- BEALL, LARRY G. (1970) *Assistant Professor of Economics*
B.A., State University of New York at Binghamton; M.A., University
of South Carolina; Ph.D., Duke University.
- BECK, SUDIE Y. (1964)*** *Instructor in English*
B.A., Phillips University; M.A., Oklahoma State University.
- BECK, WILLIAM J. (1969) *Associate Professor of French and*
Chairman, Department of Foreign Languages
B.S., M.A., Ph.D., Rutgers—The State University; Middlebury Lan-
guage School; Institut Catholique, Paris, France.
- BEDNO, EDWARD (1972) *Associate Professor of Communication*
Arts and Design and Chairman, Department of
Communication Arts and Design
B.F.A., Art Institute of Chicago, M.S. Institute of Design, I.I.T.
- BELLONI, FRANK P. (1973) *Assistant Professor of Political Science*
B.A., University of California (Riverside); M.A., University of Iowa;
Ph.D., University of California at Los Angeles.
- BERGLUND, JOHN FINDLEY (1972) .. *Assistant Professor of Mathematical*
Sciences
B.A., Ohio Wesleyan University; Ph.D., Tulane University.
- BERGMANN, LAWRENCE F. (1970) *Instructor in Theatre*
B.S., University of Massachusetts; M.A., University of Connecticut.
- BERKOWITZ, HELEN (1963) *Instructor in English*
A.B., Mount Holyoke College; M.A., University of Richmond.

**On educational leave

***Part-time

- BERRY, LEONARD L. (1971) *Associate Professor of Marketing and Chairman, Department of Marketing*
A.B., M.B.A., University of Denver; D.B.A., Arizona State University.
- BERRY, SAM G. (1971) *Assistant Professor of Finance*
B.S., M.B.A., Florida State University.
- BETTMAN, WALTER (1972)*** *Instructor in Music*
- BEVERLY, DAVID P. (1973) *Associate Professor in Social Welfare*
B.A., University of Richmond; M.S.W., Virginia Commonwealth University; D.S.W., The Catholic University of America.
- BEVILAQUA, WILLIAM OTTO (1955) *Professor of Communication Arts and Design*
B.F.A., Virginia Commonwealth University; M.F.A., University of North Carolina.
- BICK, DONALD A. (1973)*** *Instructor in Music*
B.M., Eastman School of Music.
- BIDDLE, THELMA S. (1966) *Assistant Professor of History*
B.S.Ed., Trenton, New Jersey State Teachers College; M.Ed., College of William and Mary, Ed.D., University of Virginia.
- BIEHL, ARTHUR O. (1954) *Professor of Communication Arts and Design*
B.F.A., Virginia Commonwealth University.
- BIGELOW, ALDEN G. (1957) *Associate Professor of History*
B.S., M.A., Ph.D., University of Virginia.
- BILES, PAUL E. (1971) ... *Associate Professor of Rehabilitation Counseling*
B.A., Wake Forest University; M.A., Ph.D., University of South Carolina.
- BIRINDELLI, CHARLOTTE M. (1967) *Instructor in Physical Education*
B.S., Virginia Commonwealth University.
- BIRMINGHAM, JOHN C., JR. (1966) ... *Assistant Professor of Spanish*
A.B., East Carolina University; M.A., Middlebury College; Ph. D., University of Virginia.
- BISSCHOP, JOHANNES J. (1973) ... *Assistant Professor of Quantitative Management*
B.A., M.B.A., University of Oregon; Ph.D., Johns Hopkins University.
- BLAIKIE, NORMAN W. H. (1973) *Assistant Professor of Sociology*
B.A., M.A., University of Canterbury; Ph.D., Monash University (Melbourne).
- BLAKE, JOHN A. (1949) *Associate Professor of Psychology*
A.B., Presbyterian College; M.A., Johns Hopkins University.

- BLAKE, WILLIAM E., JR. (1965) *Associate Professor of History and Acting Chairman, Department of History*
B.A., University of Cincinnati; M.A., B.D., Cincinnati Bible Seminary;
Th.M., Th.D., Union Theological Seminary.
- BLALACK, RICHARD O. (1970) *Assistant Professor of Management*
B.S., Rider College; M.B.A., D.B.A., Georgia State University.
- BLANKENSHIP, RALPH L. (1971) *Assistant Professor of Sociology*
B.A., University of Northern Iowa; M.A., Ph.D., University of Illinois.
- BLANKS, EDWIN E. (1965) *Assistant Professor of Information Systems and Director of Administrative Services, The University Computer Center*
B.S., M.S., Virginia Commonwealth University.
- BLEM, CHARLES R. (1969) *Assistant Professor of Biology*
B.S., Ohio University; M.S., Ph.D., University of Illinois.
- BLEM, LEANN B. (1973) *Instructor in Biology*
B.S., Ohio University; M.S., University of Illinois.
- BONDS, MAURICE (1942) *Professor of Art History and Chairman, Department of Art History*
B.F.A., Virginia Commonwealth University; M.A., Columbia University; Art Students League of New York (one year).
- BORGARD, JOHN H. (1971) *Assistant Professor of Psychology and Assistant Dean, School of Arts and Sciences*
A.B., M.A., Marquette University; Ph.D., Loyola University.
- BOWIE, JONATHAN T. (1963) *Assistant Professor of Communication Arts and Design*
B.F.A., Colorado College; M.F.A., University of Michigan.
- BOWLES, DONALD H. (1961) *Associate Professor of Marketing*
A.B., Harvard University; M.S., University of Richmond.
- BOYD, ROBERT S. (1973) *Assistant Professor of Mass Communications*
A.B., Bethany College (West Virginia); M.A., University of Florida.
- BOYKIN, JAMES H. (1971) *Associate Professor of Real Estate and Urban Land Development and Holder of the Alfred L. Blake Chair*
B.S., Virginia Polytechnic Institute and State University; M.Com., University of Richmond; Ph.D., American University; M.A.I., S.R.A.
- BRADFORD, JAMES A. (1969) *Assistant Professor in Painting*
B.S., M.F.A., University of Wisconsin.
- BRANDT, WARREN W. (1969) *President of the University and Professor of Chemistry*
B.S., Michigan State University; Ph.D., University of Illinois.

- BRAXTON, DOLORES B. (1970)*Instructor in Education*
B.A., Virginia Union University; M.A., Columbia University.
- BREMER, DAVID M. (1972)*Instructor in Photography*
B.F.A., M.A., Ohio University.
- BRICELAND, ALAN V. (1966)*Associate Professor of History*
A.B., College of William and Mary; M.A., Ph.D., Duke University.
- BRIGGS, FRANCES M. (1966)*Professor of Education and*
Director of Graduate Studies, School of Education
A.B., Duke University; M.A., George Peabody College; Ph.D., University of North Carolina.
- BRITTON, JUDITH (1966)****Instructor in Music*
B.S., University of Richmond.
- BROCKWELL, ARLICK (1968)*Assistant Professor of Physical Education*
A.B., Duke University; M.Ed., University of Virginia.
- BROOKE, FRANCIS J. (1968)*Professor of German and*
Provost, Academic Division
B.A., Hampden-Sydney College; M.A., University of Chicago; Ph.D. University of North Carolina.
- BROPHY, ALFRED L. (1968)*Associate Professor of Psychology*
A.B., Harvard University; A.M., Ph.D., Columbia University.
- BROWN, DARREL R. (1970)*Associate Professor of Management*
B.S., University of Kansas; M.B.A., University of New Mexico; D.B.A., University of Oregon.
- BROWN, E. ALLAN (1951)*Professor of English*
A.B., M.A., Ph.D., University of North Carolina.
- BROWN, KAY B. (1959)*Associate Professor of Distributive Education*
B.S., M.S., Virginia Commonwealth University; Ed.D., University of Virginia.
- BROWN, RUSSELL V. (1974)*Professor of Biology and Chairman,*
Department of Biology
B.A., M.A., University of Tulsa; Ph.D., Iowa State University.
- BROWNING, FRED M. (1973)*Associate Professor of*
Physical Education
B.S., Berry College; M.S., Ph.D., Florida State University.
- BUERER, JERROLD L. (1973)*Assistant Professor of Sociology*
B.A., Luther College; M.A., Ph.D., University of Iowa.
- BUMGARDNER, JAMES A. (1958)*Assistant Professor of Painting*
B.F.A., Virginia Commonwealth University; Hans Hofmann School of Art.

- BURG, GRETA N. (1971)*Instructor in Fashion Design*
A.A., Escuela Colon; B.A., M.A., Patterson State College.
- BURGART, HERBERT J. (1966)*Professor of Art and Dean,*
The School of the Arts
B.A., Long Beach State College (California) M.Ed., D.Ed., Pennsylvania State University.
- BURTON, DOROTHY T. (1965)*Assistant Professor of Education*
B.S., Virginia Commonwealth University; M.Ed., University of Virginia.
- BUSCH, J. RODNEY (1967)*Assistant Professor of Theatre*
B.A., Glenville State College (West Virginia); M.A., Pennsylvania State University.
- BUSH, BEATRICE (1973)*Instructor and Director of Student Activities*
B.F.A., Virginia Commonwealth University.
- BUSHWAY, COLLIN (1969)*Associate Professor of Management*
M.B.A., University of Chicago; D.B.A., George Washington University.
- BUSS, JAMES R. (1970)*Instructor in Theatre*
B.A., State University of Iowa; M.A., Catholic University of America.
- BUTLER, JOEL R. (1968)*Professor of Psychology*
B.A., M.S., San Francisco State College; Ph.D., Louisiana State University.
- BUTZ, RICHARD A. (1966)*Assistant Professor of Crafts*
B.F.A., Wittenberg University; M.F.A., State University of New York at Alfred.
- BUTZNER, VIOLA (1964)****Instructor in Art Education*
B.A., Barnard College.
- BYERLEY, GERALD D. (1966)*Instructor in Art Education*
B.F.A., Washington University (St. Louis); M.F.A., University of Colorado.
- CAMPBELL, E. FRENCHIE (1973)*Instructor in English*
B.S., Jackson State College; M.A., Atlanta University.
- CAMPBELL, JEWETT (1948)*Associate Professor of Painting*
and Printmaking
New York Art Students' League (three years); Skowhegan School of Painting and Sculpture (two summers); Hans Hofmann School of Art (two summers).
- CAMPBELL, KENNETH (1970)*Professor of Theatre and*
Chairman, Department of Theatre
M.A., University of Glasgow (Scotland); M.A., Johns Hopkins University; Ph.D., University of Denver.

- CARLTON, THOMAS O. (1973) *Assistant Professor of Social Work*
B.A., University of California at Los Angeles; M.A., California State
University at Los Angeles; M.S.W., University of Southern California.
- CARLYON, RICHARD N. (1960) *Assistant Professor of Painting
and Printmaking*
B.F.A., M.F.A., Virginia Commonwealth University.
- CARPENTER, EDWARD M. (1969) *Professor of Social Work*
B.A., San Francisco State College; M.S.W., D.S.W., University of
California.
- CARRIER, LORAN (1973) *Assistant Professor of Music*
A.A., Assumption Abby; B.A., Queen of Apostlec; B.M., M.M., Cath-
olic University; Ph.D., University of Maryland.
- CARSTENS, JOHN A. (1970) *Instructor in English*
B.A., Idaho State University; M.A., Ph.D., University of Oregon.
- CARTER, HARRISON S. (1973) *Assistant Professor of Information
Systems*
B.S., Georgia Southern College; M.S., United States International Uni-
versity.
- CAUSEY, ROBERT L. (1973) *Associate Professor of Mathematical
Sciences and Information Systems*
B.S., Western Kentucky University; M.S., University of Kentucky;
Ph.D., Stanford University.
- CECIL, JANE (1971) *Instructor in Elementary Education*
B.A., Sarah Lawrence College; M.S., University of Pennsylvania.
- CHERRY, MILTON (1950) *Professor of Music*
B.M., American Conservatory of Music; M.M., Chicago Musical Col-
lege; private pupil of Hugo Kortschak, New York City.
- CHINNICI, JOSEPH P. (1970) *Assistant Professor of Biology*
B.A., LaSalle College; Ph.D., University of Virginia.
- CHRISTIANSON, PAUL A. (1971) *Assistant Professor of Music*
B.A., Bemidji State College; M.M., University of Miami.
- CLEARFIELD, SIDNEY M. (1967) *Associate Professor of Social Work
and Assistant Dean, School of Social Work*
B.S., Temple University; M.S.W., University of Pennsylvania; D.S.W.,
Catholic University of America.
- COATES, ANN R. (1973) *Instructor in Business*
B.S., M.S., Virginia Commonwealth University.
- COFFMAN, EDWARD N. (1966) *Assistant Professor of Accounting*
B.S., M.S., Virginia Commonwealth University; D.B.A., George Wash-
ington University.

- COHEN, STEPHEN B. (1968) *Assistant Professor of Mathematical Sciences*
B.S., M.S., Ph.D., University of Arizona.
- COLEMAN, EARLE J. (1971) *Assistant Professor of Philosophy and Religious Studies*
A.B., Illinois College; M.A., Ph.D., University of Hawaii.
- CONE, ROBERT T. C. (1968) *Assistant Professor of Economics*
B.S., M.S., Virginia Commonwealth University.
- COPPEDGE, WALTER R. (1968) *Professor of English*
B.A., University of Mississippi; B.Litt., Oxford University; M.A., Memphis State University; M.A., Ph.D., Indiana University.
- COURTS, VELESTO H. (1972) *Instructor in Theatre*
B.S., Hampton Institute; M.F.A., Virginia Commonwealth University.
- CRAMER, JAMES A. (1973) *Assistant Professor of Sociology*
B.S., Florida State; M.A., Sam Houston State University; Ph.D., University of Tennessee.
- CRAVER, SAMUEL M. (1970) *Assistant Professor of Education*
B.A., M.A.T., Ph.D., University of North Carolina.
- CRIM, KEITH R. (1973) *Associate Professor of Philosophy and Religious Studies*
B.A., Bridgewater College; B.D., Th.M., Th.D., Union Theological Seminary.
- CROMARTIE, JANE S. (1970) *Assistant Professor of Marketing*
B.A., M.B.A., Ph.D., University of Florida.
- CROMEY, ROBERT D. (1973) *Assistant Professor of History*
B.A., M.A., Ph.D., University of Wisconsin.
- CROSS, JEANETTE (1972)*** *Instructor in Music*
Peabody Conservatory of Music; Royal Academy of Music.
- CROSSWELL, RUDOLPH (1972) *Assistant Professor of Music*
B.S., Columbia University; M. A., California State College at Los Angeles.
- CROWLEY, JOSEPH J. (1973) *Assistant Professor of Psychology*
A.B., Brown University; M.S., Ph.D., Florida State.
- CRUMP, JULIETTE T. (1969)*** *Instructor in Theatre*
A.B., Randolph-Macon Woman's College.
- CRUTCHFIELD, GEORGE THOMAS (1970) *Associate Professor of Mass Communications and Chairman, Department of Mass Communications*
B.S., Florida Southern College; M.S., Florida State University.

- CULL, JOHN G., JR. (1966) *Professor of Rehabilitation Counseling*
B.S., M.Ed., Texas A. and M. University; Ph.D., Texas Technological
College.
- CURTLE, GERTRUDE C. (1958) *Assistant Professor of English*
B.A., Vassar College; M.A., University of Richmond.
- DAHLKE, H. OTTO (1966) *Professor of Social Work*
B.A., M.A., University of Illinois; Ph.D., University of Wisconsin;
Third Year Certificate in Social Work, University of Pennsylvania.
- DANCE, DARYL C. (1972) *Assistant Professor of English*
A.B., M.A., Virginia State College; Ph.D., University of Virginia.
- DASHEK, WILLIAM VINCENT (1970) *Assistant Professor of Biology*
B.S., M.S., Ph.D., Marquette University.
- DAUGHTREY, WILLIAM H., JR. (1972) *Assistant Professor of*
Business Administration and Management
B.S., Hampden-Sydney College; J.D., University of Richmond.
- DAVIS, BENJAMIN JOSEPH (1972) *Assistant Professor of Social Work*
B.A., Dillard University; M.S.W., Tulane University.
- DAVIS, HERBERT J. (1969) *Assistant Professor of Business*
B.S., Villanova University; M.B.A., East Carolina University.
- DAVIS, ROBERT G. (1973) *Assistant Professor of Physical Education*
B.S., West Chester State College; M.Ed., Penn State University;
Ph.D., University of Maryland.
- DAVIS, WILLIAM T. (1973) *Instructor in Theatre*
B.A., Lawrence University; M.B.A., Northwestern University.
- DEAL, ALICE BOYD (1970) *Assistant Professor and Librarian for*
the School of the Arts
B.A., University of North Dakota; M.A., University of Cincinnati;
B.S.L.S., Case Western Reserve University.
- DeGENARO, GUY J. (1970) *Associate Professor of Management*
B.S., University of Maryland; M.B.A., Indiana University; Ph.D., Uni-
versity of Florida.
- DELL, WILLIE J. (1969) *Assistant Professor of Social Work*
B.A., St. Augustine's College; M.S.W., Virginia Commonwealth Uni-
versity.
- DENNIS, RUTLEDGE M. (1971) *Assistant Professor of Sociology and*
Coordinator, Afro-American Studies Program
B.A., South Carolina State College; M.A., Washington State Uni-
versity.
- DENNIS, TANYA D. (1973) *Instructor in Physical Education*
B.A., University of California at Los Angeles; M.A., George Peabody
College.

- DePILLARS, MURRY N. (1971) *Assistant Professor of Art and
Assistant Dean, School of the Arts*
B.A., M.A., Roosevelt University, Chicago, Illinois.
- DeSMIDT, THOMAS H. (1971) *Instructor in Painting and Printmaking
and Director, Art Foundations Program*
A.A., Lincoln College; B.F.A., Layton School of Art; M.F.A., Syracuse
University.
- DIANA, JEANNE E. (1968) *Associate Professor of Social Welfare*
B.S., Juniata College; M.L., Ph.D., University of Pittsburgh.
- DIANA, LEWIS (1968) *Professor of Sociology*
A.B., Harvard University; M.A., Ph.D., University of Pittsburgh.
- DISTEFANO, JOSEPH (1971) *Instructor in Crafts*
B.F.A., Rochester Institute of Technology; M.F.A., Yale University.
- DINTIMAN, GEORGE B. (1968) *Professor of Education
and Chairman, Department of Physical Education*
B.S., Lock Haven State College; M.A., New York University; Ed.D.,
Columbia University.
- DITTMAN, NANCY A. (1971) *Associate Professor of Business
Education and Office Administration*
B.S., Florida State University; M.Ed., University of Florida; Ed.D.,
University of Colorado.
- DIXON, CLIFTON (1968) *Assistant Professor in Photography*
B.A., King College; B.D., Union Theological Seminary.
- DONATO, GERALD M. (1967) *Assistant Professor of Painting
and Printmaking*
B.S., M.A., Northern Illinois University; M.F.A., University of Wis-
consin.
- DORSAM, PAUL (1973) *Assistant Professor of Music*
B.M., M.M., New England Conservatory of Music.
- DOWDY, MARSHALL D. (1967) *Instructor in Retailing*
B.S., M.S., Virginia Commonwealth University.
- DRISCOLL, NANCY A. (1957) *Assistant Professor of Education*
A.B., College of William and Mary; M.S., University of Richmond.
- DUFF, JAMES W., JR. (1969) *Instructor in Business*
B.S., Western Carolina University; M.S., Virginia Commonwealth
University.
- DUKE, ELIZABETH F. (1966) *Associate Professor of English*
B.A., Longwood College; M.A., University of Virginia; Ph.D., Uni-
versity of Iowa.
- DUKE, J. MAURICE (1966) *Associate Professor of English*
A.B., College of William and Mary; M.A., Ph.D., University of Iowa.

- DUNCAN, JACK A. (1970) *Associate Professor of Education*
B.S., Millersville State College; M.Ed., Temple University; Ed.D.,
University of Georgia.
- DUNCAN, PATRICIA H. (1971) *Assistant Professor of Elementary*
Education and Director of the Reading Center
B.S., Millersville State College; M.Ed., Ed.D., University of Georgia.
- DUNN, DAYLE TALIAFERRO (1973)*** *Instructor in Education*
B.A., Virginia State College; M.A., Catholic University of America
- DUVALL, WILLIAM H. (1972) *Assistant Professor of Education*
B.A., M.Ed., University of Maryland; Ed.D., Indiana University.
- DuVERNAY, ROBERT P., JR. (1969) . . . *Instructor in Information Systems*
B.S., M.S., University of Southwestern Louisiana.
- EARL, JACK (1972) *Assistant Professor of Crafts*
B.A., Bluffton College; M.A., Ohio State University.
- EASTMAN, ALLAN A. (1950) *Professor Emeritus of Crafts*
B.S., University of New York at Buffalo; Diploma in Art Education,
Pratt Institute; Diploma in Design, Vesper George School of Art.
- EDWARDS, CHARLES E. (1972) *Instructor in Accounting*
B.S., Virginia Commonwealth University; CPA.
- EDWARDS, WILLIAM O. (1960) *Associate Professor of Business*
and Director of University Relations
B.S., M.A., University of Missouri.
- EGGLESTON, NORMAN E. (1972) . . . *Associate Professor and Chairman,*
Department of Social Welfare
A.B., Doane College; M.S.W., University of Nebraska; Ph.D., Uni-
versity of Chicago.
- ELLIN, VINCENT (1973)*** *Instructor in Music*
B.M., New England Conservatory of Music.
- ELY, VIVIEN KING (1962) *Associate Professor of Secondary/*
Post Secondary Education
B.S., East Tennessee State University; M.S., Virginia Common-
wealth University; M.Ed., University of Virginia.
- EPPS, JEAN M. (1969) *Instructor in Education*
B.S., Virginia State College; M.S., Virginia Commonwealth Univer-
sity.
- EPPS, ROZANNE G. (1965) *Instructor and Assistant to the Director*
of Evening College and Summer Sessions
B.A., Vassar College; M.A. Goddard College.
- ERICKSON, MAURICE LEONARD (1970) *Instructor in Theatre*
B.S., Dickinson State College, M.F.A., Ohio University.

- ESCOFFERY, AUBREY (1972)****Visiting Lecturer in Afro-American Studies*
B.S., M.A., Columbia University; Ph.D., University of Connecticut.
- ETKIN, MICHAEL W. (1969)*Assistant Professor of Psychology*
B.S., New York University; M.S., Ph.D., Rutgers-The State University.
- FALKE, DAVID R. (1963)*Assistant Professor of Business*
B.S., University of Pittsburgh; M.B.A., University of Maryland.
- FALLEN, NANCY H. (1967)*Assistant Professor of Special Education*
B.S., Mary Washington College; M.Ed., College of William and Mary; Ed.D., University of Maryland.
- FARLEY, REUBEN W. (1968)*Associate Professor of Mathematical Sciences*
B.S., Randolph-Macon College; M.A., Ph.D., University of Tennessee.
- FAULS, JOHN T. (1966)*Associate Professor of Psychology*
A.B., Harvard University; Ph.D., Florida State University.
- FEDERICO, SALVATORE L. (1967)*Assistant Professor of Painting and Printmaking*
B.F.A., Virginia Commonwealth University, M.A., Hunter College.
- FERGUSON, BOBBY R. (1964)*Assistant Professor of Marketing*
B.A., Roanoke College; M.S., Virginia Polytechnic Institute and State University.
- FERGUSON, CLINTON S. (1959)*Associate Professor of Economics*
B.B.A., University of Chattanooga; M.S., University of Tennessee.
- FERGUSON, JERRY THOMAS (1965)***Assistant Professor of Business Administration*
B.S., M.S., Virginia Polytechnic Institute and State University.
- FERRIS, MICHAEL H. (1971)*Assistant Professor of Art Education*
B.A., St. Ambrose College; M.S.Ed., Southern Illinois University; D.Ed., Ball State University.
- FIELD, JERRY JEWETT (1961)*Associate Professor of Interior Design*
B.S., Certificate in Interior Design, Virginia Commonwealth University; Diploma, Parsons School of Design.
- FIELDS, OWEN F. (1972)*Assistant Professor of Business Education and Office Administration*
B.S., Waynesburg College; M.Ed., Ed.D., University of Pittsburgh.
- FISHER, KIM N. (1972)*Instructor and Assistant Reference Librarian*
B.A., University of Kentucky; M.A. in Library Science, University of Kentucky.

**On educational leave

***Part-time

- FISHER, MARCIA F. (1970)*Instructor and Assistant to the Director of Evening College and Summer Sessions*
A.B., Brown University, M.A., University of Connecticut.
- FITZPATRICK, MARY JANE (1970)*Instructor in Music*
B.A., Mary Washington College; M.A., University of Iowa.
- FITZSIMMONS, LLOYD D. (1971)****Instructor in Interior Design*
B.A., B.Arch., Yale University.
- FLEMING, GLADYS (1969)*Professor of Education*
B.A., Western Michigan University; M.A., University of Wisconsin; Ed. D. New York University.
- FLEMING, ROBERT S. (1968)*Professor of Education*
A.B., East Carolina College; M.A., George Peabody College; Ed.D., New York University; Litt. D., Trenton State College.
- FLESHOOD, ARNOLD PENDLETON (1965)*Professor of Education*
Assistant Vice-President for Academic Affairs
B.A., University of Richmond; M.S., Virginia Polytechnic Institute and State University, Ed.D., Columbia University.
- FLETCHER, CHARLES E. (1967)*Assistant Professor of Accounting*
B.S., University of Alabama; M.A., New Mexico Highlands University.
- FLINT, RICHARD C. (1973)*Instructor in Art History*
B.A., Harpur College; M.A., Hunter College.
- FLOWERS, ALICE FUNKHOUSER (1970)****Instructor in Theatre*
B.A., Mary Washington College; M.A., University of Virginia.
- FORBES, DAVID C. (1972)*Assistant Professor of Social Work*
B.A., Shaw University; M.S.W., Adelphi University School of Social Work.
- FORREST, JOYCE T. (1969)*Instructor in Information Systems*
B.S., M.S., Virginia Commonwealth University.
- FOSTER, CHARLES A. B. (1946)*Professor of Engineering and*
Coordinator, Curriculum in Engineering
B.S., B.S., M.S., Virginia Polytechnic Institute and State University.
- FOX, JAMES E. (1971)*Assistant Professor of Art History*
B.S., University of North Carolina; M.A., Florida State University.
- FRANKE, IRVING F. (1973)*Associate Professor of Social Welfare/*
Sociology
B.A., Wilson Teachers College; M.A., Ph.D., University of Maryland.
- FRANKLIN, McDONALD, JR. (1969)*Assistant Professor of Social Work*
B.S., St. Paul's College; M.S.S.W., Virginia Commonwealth University.

- FREASIER, BARNEY R., SR. (1968) *Associate Professor of Philosophy and Religious Studies*
B.A., Ouachita Baptist University; B.D., Southern Baptist Theological Seminary; Th.D., Immanuel Baptist Seminary.
- FREASIER, B. ROLAND, JR. (1967) *Associate Professor of Taxation*
B.S., University of Richmond; M.S., Virginia Commonwealth University; J.D., M.L. & T., College of William and Mary; CPA.
- FREED, DAVID C. (1967) . . *Assistant Professor of Painting and Printmaking*
B.F.A., Miami University (Ohio); M.F.A., University of Iowa; Royal College of Art, London (one year).
- FRIEDMAN, WILLIAM H. (1969) *Assistant Professor of Philosophy*
B.A., M.A., University of Pennsylvania; B.H.L., Gratz College; Ph.D., University of Virginia.
- FUHRMANN, BARBARA SCHNEIDER (1972) *Assistant Professor of Education*
B.A., Beliot College; M.Ed., Wisconsin State University; Ed.D., University of Massachusetts.
- FUHRMANN, STEVEN (1972) *Assistant Professor of Education*
B.S., University of Wisconsin; M.Ed., Wisconsin State University; Ed.D., University of Massachusetts.
- FULBRIGHT, EVELYN R. (1968) *Professor of Education and Chairman, Department of Elementary Education*
A.B., M.A., Marshall University; Ed.D., Duke University.
- FULLER, MYRON C. (1971) *Instructor in Education (Learning Resources Center)*
B.S., Virginia Commonwealth University.
- FULTON, JOAN (1973) *Instructor in Elementary Education*
B.A., Coe College; M.F.A., University of Iowa.
- GAGER, HELEN M. (1973) *Instructor in Chemistry*
A.B., Mount Holyoke College; M.A., Indiana University; Ph.D., Virginia Commonwealth University.
- GAIROLA, KRISHNA C. (1969) *Associate Professor of Art History*
B.A., M.A., Allahabad University; Ph.D., London University; D.E.L., Ecole du Louvre.
- GALLAGHER, CHARLES J. (1971) *Assistant Professor of Economics*
B.S., Rider College; Ph.D., West Virginia University.
- GARDNER, HELEN C. (1972) *Instructor in Urban Studies*
B.A., Virginia Union University.
- GARGIULO, RAYMOND JOSEPH (1970) . . *Assistant Professor of Education*
B.S., M.Ed., Ohio University; Ed.D., University of New Mexico.

- GARNER, HOWARD G. (1973) *Assistant Professor of Education*
A.B., University of North Carolina; M.Ed., Ph.D., University of Florida.
- GEORGE, WILLIAM R. (1973) *Assistant Professor of Marketing*
A.B., Thiel College; M.B.A., University of Pittsburgh; Ph.D., University of Georgia.
- GILBREATH, GLENN H. (1971) *Assistant Professor of Quantitative Management*
B.S., M.A., Ph.D., University of Alabama.
- GILBREATH, JERRI D. (1973) *Assistant Professor of Business*
B.A., Auburn University; J.D., University of Alabama.
- GIOVANNONI, JEANNE M. (1972)*** *Visiting Associate Professor of Social Work*
A.B., M.S.W., University of California at Berkeley; Ph.D., Brandeis University.
- GLADDING, JANE B. (1947) *Associate Professor of Chemistry and Associate Dean of Student Life*
B.A., Smith College; M.S., University of Richmond.
- GLOVER, JACK D. (1967) *Assistant Professor of Education*
B.F.A., John Herron Art Institute (Indianapolis); M.S., Indiana University.
- GLYNN, WILLIAM A. (1968) *Professor of Mathematical Sciences and Chairman, Department of Mathematical Sciences*
B.S., Northeastern Oklahoma State College; M.S., Ph.D., Oklahoma State University.
- GOGGIN, WILLIAM F. (1966) *Assistant Professor of Education*
B.A., College of William and Mary; M.Ed., Ed.D., University of Virginia.
- GOLD, HILDA (1958) *Assistant Professor of Social Work*
B.A., Douglass College; Diploma, New York School of Social Work.
- GOHLMAN, SUSAN A. (1973) *Assistant Professor of English*
B.A., Western Michigan University; M.A., Ph.D., University of Michigan.
- GOLDSTEIN, LEWIS C. (1955) *Professor of Biology and Assistant Dean, School of Arts and Sciences*
B.S., M.S., University of Richmond; Ph.D., University of Virginia.
- GOODMAN, GAY (1971) *Assistant Professor of Education*
B.S., M.S., Texas Technological University; Ed.Sp., Ph.D., University of Iowa.

- GOODSON, LOIS MAE (1972) *Instructor in Education*
(*Learning Resources Center*)
B.S., Richmond Professional Institute.
- GOOTNICK, DAVID E. (1971) *Assistant Professor of Business*
Education and Office Administration
B.A., Queens College; M.Ed., Northeastern University; Ph.D., Georgia State University.
- GRANT, GEORGE C. (1969) *Assistant Professor of Chemistry*
B.A., Lehigh University; Ph.D., Rensselaer Polytechnic Institute.
- GREENE, JANIPHER R. (1969) *Instructor in Political Science*
B.A., Virginia Union University; M.S., Southern Connecticut State College.
- GREENE, THEODORE H. (1969) *Assistant Professor of Theatre*
B.A., Valley State College; M.A., University of Southern California.
- GREENFIELD, LOUISE (1973) *Instructor and Assistant Librarian*
(*Curriculum Laboratory*)
A.B., Temple University; M.L.S., Drexel University.
- GREER, HAROLD E., JR. (1968) *Assistant Professor of History*
A.B., M.A., Ph.D., University of Alabama; Th.M., New Orleans Baptist Theological Seminary.
- GREER, LAURA B. (1973) *Instructor in Business Education*
and Office Administration
B.S., M.A., University of Alabama.
- GRIFFIN, CLAUDIUS W. (1960, 1969) *Assistant Professor of English*
B.S., M.A., University of Richmond; Ph.D., Indiana University.
- GRIFFIN, JOHN E., JR. (1966) *Instructor in Engineering*
B.S., M.A., Appalachian State University.
- GRIGGS, WALTER S., JR. (1971) *Assistant Professor of Business*
M.H., J.D., University of Richmond.
- GRIMSLEY, JAMES E. (1954)*** *Instructor in Mass Communications*
A.B., College of William and Mary.
- GROMAN, WILLIAM D. (1965) *Professor of Psychology*
B.A., M.S., University of Miami (Florida); Ph.D., Duke University.
- GROVES, BARNEY R. (1970) *Associate Professor of Education and*
Director, Intramural Sports
B.S., Southeastern State College; M.S., Oklahoma University; Ph.D., Florida State University.
- GULAK, MORTON B. (1972) *Assistant Professor of Urban Studies*
B.A., Penn State University; M.Ur.P., Virginia Polytechnic Institute and State University.

- GUNTER, BEN D. (1965) *Associate Professor of Interior Design and Chairman, Department of Interior Design*
A.B., Bridgewater College; B.F.A., Virginia Commonwealth University; M.Ed., University of Virginia.
- HAAS, FREDERICK C. (1969) *Associate Professor of Management*
B.B.A., M.B.A., M.A., Hofstra College; Ph.D., University of Florida.
- HAGUE, JAMES L. (1970) *Assistant Professor of Administration of Justice and Public Safety*
B.A., Washington and Lee University; J.D., University of Michigan Law School.
- HAILES, ROGER P. (1972) *Instructor in English*
B.A., David & Elkins College; M.A., University of Richmond; Ph.D., University of South Carolina.
- HALL, A. LEE (1954, 1963) *Associate Professor and Chairman, Department of Information Systems*
B.S., M.S., Virginia Polytechnic Institute and State University; Ph.D., Colorado State University.
- HALL, J. CURTIS (1962) *Professor and Dean of School of Business*
A.B., Duke University; M.S., Virginia Polytechnic Institute and State University; Ed.D., Columbia University.
- HALL, THOMAS O., JR. (1967) *Professor of Philosophy and Religious Studies and Chairman, Department of Philosophy and Religious Studies*
A.B., Hampden-Sydney College; B.D., Th.M., Th.D., Southwestern Baptist Theological Seminary.
- HALLORAN, DENNIS A. (1971) *Instructor in Art History*
B.S., Loyola University; M.A., University of Wisconsin.
- HAMILTON, DOROTHY TENNENT (1946) *Assistant Professor of Interior Design*
Certificate in Interior Design, Virginia Commonwealth University.
- HAMILTON, L. MARTHA (1971) *Assistant Professor of Education*
A.B., Calvin College; M.A., University of Illinois.
- HAMM, GLENN B. (1969) *Instructor in Art Education*
B.F.A., M.F.A., Carnegie-Mellon University.
- HANNA, JOHN (1971)*** *Instructor in Administration of Justice and Public Safety*
M.S., Yale University.
- HARDY, DOROTHY M. (1960) *Assistant Professor in Interior Design*
B.F.A., Virginia Commonwealth University.

- HARDY, RICHARD E. (1960)*Professor and Chairman,
Department of Rehabilitation Counseling*
B.S., Virginia Polytechnic Institute and State University; M.S., Virginia Commonwealth University; A.G.S., Ed.D., University of Maryland.
- HARRIS, GRACE E. (1967)***Assistant Professor of Social Work*
B.S., Hampton Institute; M.S.S.W., Virginia Commonwealth University.
- HARRISON, WILLIAM B. III (1972)*Assistant Professor of Economics*
B.A., M.A., University of Richmond; Ph.D., University of Maryland.
- HARTNETT, JOHN J. (1968)*Associate Professor of Psychology*
B.A., University of Vermont; M.S., North Carolina State University; Ph.D., Wayne State University.
- HAWKES, GLENN R. (1968)*Professor of Psychology*
B.A., M.A., Ph.D., University of Virginia.
- HAWKINS, O. REBECCA (1971)*Assistant Professor of Education*
B.S., Virginia Commonwealth University; M.S., Virginia Polytechnic Institute and State University.
- HAWLEY, SANDRA M. (1971)*Assistant Professor of History*
A.B., M.A., The College of William and Mary; Ph.D., Case Western Reserve University.
- HAYDEN, BRIAN D. (1973)*Instructor in Sociology*
B.A., University of Colorado; M.A., University of Toronto.
- HAYMES, HARMON H. (1968)*Professor of Economics*
B.A., Lynchburg College; M.A., Ph.D., University of Virginia.
- HEBERT, BUDD H. (1970)*Assistant Professor of Urban Studies*
B.S., M.S., Arizona State University; Ph.D., Ohio State University.
- HELGOTT, MYRON (1968)*Assistant Professor of Sculpture*
B.A., M.F.A., Southern Illinois University.
- HELLMUTH, WILLIAM F. (1973)*Professor of Economics and
Chairman, Department of Economics*
B.A., Ph.D., Yale University.
- HENRY, CHARLES R. (1968)*Instructor in Sculpture*
B.F.A., Cleveland Institute of Art; M.F.A., Cranbrook Academy of Art.
- HENRY, JOHN (1973)*Instructor in Art Education*
B.A., University of Dayton; M.Ed., Antioch College.
- HENRY, NATHANIEL H. (1968)*Professor of English*
B.A., M.A., Ph.D., University of North Carolina.

**On educational leave

- HENSEL, JAMES S. (1972) *Assistant Professor of Marketing*
B.A., Ohio Northern University; M.B.A., Miami University (Ohio);
Ph.D., Ohio State University.
- HEROY, JOHN N. (1971) *Instructor in Photography*
B.F.A., Rochester Institute of Technology; M.F.A., State University
of New York.
- HERRINGTON, NANCY S. (1971) *Instructor in Fashion Design*
B.F.A., Virginia Commonwealth University.
- HESTER, ROBERT F. (1953) *Professor of Interior Design and*
Assistant Dean, The School of the Arts
B.S., Wake Forest College; Diploma, Parsons School of Design;
Graduate Study, University of London; M.A., Cornell University;
National Trust Summer School (England).
- HILL, ADA D. (1969) *Instructor in Education*
B.A., St. Augustine's College, M.S., Virginia State College.
- HILTON, JOHN T. (1950) *Professor of Communication*
Arts and Design
B.F.A., Yale School of Fine Arts; M.S., Institute of Design, Illinois
Institute of Technology.
- HINTER-REITER, H. GILDA (1967) *Associate Professor of Art History*
B.A., Sir George Williams University (Canada); M.Ed., Ph.D., Penn-
sylvania State University.
- HISE, RICHARD T. (1974) *Associate Professor of Marketing and*
Director of Graduate Studies, School of Business
B.A., Gettysburg College; M.B.A., D.B.A., University of Maryland.
- HODGES, JAMES O. (1974) *Assistant Professor of Education*
B.A., M.Ed., West Texas State University; Ph.D., University of Colo-
rado.
- HODGES, RAYMOND (1940) *Professor Emeritus of Theatre*
B.S., State College, Bloomsburg, Pennsylvania; M.A., Teachers Col-
lege, Columbia University.
- HOFFER, GEORGE E. (1970) *Assistant Professor of Economics*
B.S., University of Richmond; M.S., Virginia Polytechnic Institute
and State University; Ph.D., University of Virginia.
- HOLLAND, GLORIA J. (1970) *Instructor and Circulation Librarian*
B.A., Mary Washington College; M.S.L.S., University of North Caro-
lina.
- HOLLOWAY, C. THOMAS (1957) *Associate Professor of Theatre*
B.F.A., Virginia Commonwealth University; M.F.A., Boston Univer-
sity.
- HOLMES, ALPHEUS F. (1973) *Instructor in English*
B.A., Virginia Commonwealth University; M.A., Old Dominion Uni-
versity.

- HOOKE, JAMES F. (1970) *Assistant Professor of Psychology*
A.B., Brandeis University; Ph.D., University of Nebraska.
- HORMACHEA, CARROLL R. (1964) *Associate Professor of*
Administration of Justice and Public Safety
B.A., M.S., Trinity University.
- HORMACHEA, MARION M. (1964) *Associate Professor of Recreation*
B.S., Virginia Commonwealth University; M.S., University of Richmond.
- HORNBuckle, PHYLLIS A. (1968) *Assistant Professor of Psychology*
A.B., Pfeiffer College; M.A., College of William and Mary; Ph.D., Emory University.
- HOUGHTON, CLARE G. (1965) *Assistant Professor of Library Science*
B.A., Radford College; M.A., George Peabody College for Teachers.
- HOUSER, EDWARD (1973) *Instructor in Theatre*
B.A., University of Texas.
- HOWELL, DEAN (1973) *Assistant Professor of Art Education*
B.S., M.Ed., Miami University; D.Ed., Ball State University.
- HUDGINS, H. WAYNE (1967)** *Instructor in Accounting*
B.S., M.C., University of Richmond.
- HUMPHREYS, NEIL J. (1969) *Assistant Professor Management*
B.S., M.B.A., Drexel Institute of Technology; Ph.D., University of Pennsylvania.
- HUNT, EUGENE H. (1968) *Associate Professor of Business*
B.S., M.S., Virginia Commonwealth University; Ed.D., University of Maryland.
- HUNTER, JACK R. (1957)*** *Associate Professor of Mass*
Communications
B.A., University of Virginia; M.A., University of Richmond.
- HURLBERT, BRUCE M. (1973) *Assistant Professor and Assistant*
Director, James Branch Cabell Library
B.A., The Citadel; M.S., Florida State University.
- HUTCHINSON, HAROLD E. (1973) *Documents Librarian*
B.A., Pennsylvania State University; M.L.S., Syracuse University.
- HUTCHINSON, JOHN D. IV (1967) *Assistant Professor of*
Rehabilitation Counseling
B.S., Virginia Polytechnic Institute and State University; M.S., Virginia Commonwealth University.
- HYNISON, PRISCILLA C. (1967) *Associate Professor of Art Education*
B.S., East Carolina College; M.A., Ed.D., George Peabody College.

**On educational leave

***Part-time

- INGE, M. THOMAS (1969)*Professor of English and Chairman, Department of English*
B.A., Randolph-Macon College; M.A., Ph.D., Vanderbilt University.
- IPSEN, KENT F. (1973)*Associate Professor of Crafts and Chairman, Department of Crafts*
B.S., M.S., M.F.A., University of Wisconsin.
- ITZKOVITZ, CHARLES (1969)***Assistant Professor of Social Work*
B.A., Brandeis University; M.S.W., Rutgers University.
- JACKSON, J. HOWARD (1971)*Associate Professor of Business Education and Office Administration*
B.S., M.S., University of Tennessee; Ph.D., Ohio State University; CPS.
- JARMON, CHARLES (1972)*Assistant Professor of Sociology and Afro-American Studies*
B.S., M.S., North Carolina Central University at Durham; Ph.D., State University of New York at Buffalo.
- JARRELL, GEORGE R. (1969)*Associate Professor of Rehabilitation Counseling and Assistant Dean, School of Community Services*
B.S., M.R.C., University of Florida; Ph.D., University of South Carolina.
- JEFFREY, JACKSON E. (1962)*Associate Professor of Biology*
B.S., Virginia Commonwealth University; R. P. T. and Certificate in Physical Therapy, Medical College of Virginia of Virginia Commonwealth University; M.S., Virginia Polytechnic Institute and State University; Ph.D., Medical College of Virginia of Virginia Commonwealth University.
- JEGERMANIS, VALTS E. (1971)*Instructor in Mass Communications*
A.B., University of North Carolina.
- JENKINS, JOSEPH H. (1973)*Associate Professor of English*
B.A., Hamilton College; M.A., Harvard University.
- JENKINS, KEDRON (1972) ..*Instructor and Assistant Reference Librarian*
B.A., Westhampton; M.S., University of North Carolina.
- JENNINGS, GEORGE W. (1966)*Professor of Economics*
A.B., Emory University; M.A., University of Georgia; Ph.D., University of Virginia.
- JOHNSON, BARBARA (1972)*Instructor in Crafts*
M.F.A., Southern Illinois University; Diploma, Ulster College of Arts.
- JOHNSON, DENNIS W. (1973) ...*Assistant Professor of Political Science*
B.A., Carleton College; M.A., Ph.D., Duke University.

**On educational leave

- JOHNSON, IRIS W. (1971) *Instructor in Business Education and Office Administration*
B.S., Longwood College; M.S., Virginia Commonwealth University.
- JOHNSON, JERRIE (1972) *Assistant Professor and Director of Admissions*
B.S., Iowa State University; M.S. in Ed., Southern Illinois University.
- JOHNSON, LUCIE J. (1967)*** *Assistant Professor of Social Work*
A.B., Wake Forest University; M.S.W., Tulane University.
- JOHNSON, MILES F. (1968) *Associate Professor of Biology and Curator of the Herbarium*
B.S., Wisconsin State University at River Falls; M.S., University of Wisconsin; Ph.D., University of Minnesota.
- JOHNSTON, ROBERT H. (1970) *Assistant Professor of Mathematical Sciences*
B.S., M.A., Miami University (Ohio).
- JOHNSTON, RUSSELL A. (1956) . . *Professor and Chairman, Department Business Administration and Management*
B.S., M.S., Virginia Commonwealth University; Ed.D., University of Kentucky.
- JOHNSTON, WALLACE R. (1971) . . . *Assistant Professor of Management*
B.B.A., M.B.A., D.B.A., George Washington University.
- JOHNSTON, WAYNE L. (1972) *Instructor in Social Work*
B.S., Richmond Professional Institute, M.S.W., Virginia Commonwealth University.
- JONES, JEAN BOYD (1964) *Associate Professor of Social Work*
A.B., Oberlin College; M.S.S.A., Western Reserve University.
- JONES, SHARON GALLAGHER (1969) . . *Assistant Professor of Art History*
B.A., M.A., Pennsylvania State University; Ph.D., New York University.
- JONES, VIROUS W. (1970) *Assistant Professor of Social Work*
B.A., Virginia State College; M.S.W., Atlanta University School of Social Work.
- JORDAN, ANNE S. (1965) *Instructor in English*
B.S., College of William and Mary; M.Ed., University of Virginia.
- JORDAN, DANIEL P., JR., (1969) *Associate Professor of History*
B.A., M.A., University of Mississippi; Ph.D., University of Virginia.
- KALIF, GEORGE T. (1943) *Professor of Social Work*
B.A., M.A., M.S.W., Tulane University; Ph.D., Harvard University.
- KALLIENKE, ELLEN E. (1973) *Instructor in English*
B.S., Southern Connecticut State College; M.A., Central Washington State College.

- KALLIENKE, GERHARD S. (1972) *Assistant Professor of German*
B.A., Southern Connecticut State College; M.A., Ph.D., Rice University.
- KAPP, MARY E. (1940, 1946)† *Professor Emeritus of Chemistry*
A.B., University of North Carolina; M.A., Duke University; Ph.D., University of North Carolina.
- KEENAN, THOMAS L. (1970) *Assistant Professor of Social Work*
A.B., University of Michigan; M.S.W., University of Michigan School of Social Work.
- KEESEE, C. G., JR. (1957) *Associate Professor of Education*
and Director of Teacher Certification
B.S., American University; S.T.B., Westminster Theological Seminary; M.Ed., Ed.D., University of Virginia.
- KELLY, J. PATRICK (1972) *Assistant Professor of Marketing*
B.S., Brigham Young University; M.B.A., University of Utah; Ph.D., University of Illinois.
- KENNEDY, SUSAN E. (1973) *Assistant Professor of History*
B.A., Marymount Manhattan College; M.A., Ph.D., Columbia University.
- KERRIGAN, THOMAS L. (1971) *Instructor in Crafts*
B.S., Wisconsin State University; M.A., M.F.A., Ohio University.
- KEVORKIAN, RICHARD E. (1964) *Associate Professor of Painting and*
Printmaking and Chairman, Department of
Painting and Printmaking
B.F.A., Virginia Commonwealth University; Summer Session, Pennsylvania Academy of Fine Arts; M.F.A., California College of Arts and Crafts.
- KIEHL, EDWARD (1968)*** *Instructor in Music*
B.M.E., Wichita University.
- KIESLER, DONALD J. (1973) *Professor of Psychology*
A.B., Bellarmine College; Ph.D., University of Illinois.
- KOLEVZON, MICHAEL S. (1973) *Assistant Professor of Social Work*
B.A., New York University; M.S.W., Wayne State University; D.S.W., University of California.
- KIMBROUGH, T. DANIEL, JR. (1967) *Associate Professor of Biology*
B.S., M.A., University of Alabama; Ph.D., Auburn University.
- KING, MARY A. (1972) *Catalog Librarian*
B.A., American University; M.S.L.S., Florida State University.
- KIRK, THOMAS A., JR. (1966)** *Assistant Professor of Psychology*
B.A., St. Vincent College (Pennsylvania); M.A., Ph.D., Catholic University.

**On educational leave

***Part-time

†Retired, July, 1973

- KLIENER, RICHARD E. (1972) *Assistant Professor of Education*
B.B.A., M.S., City College of New York.
- KNAPPENBERGER, PAUL H. (1973)*** *Assistant Professor of Physics*
B.A., Franklin and Marshall College; M.A., Ph.D., University of Virginia.
- KNIPE, EDWARD E. (1969) *Associate Professor of Sociology and Anthropology*
B.A., M.A., University of Arizona; Ph.D., University of Kentucky.
- KOPIT, MARVIN (1974) *Assistant Professor of Education*
A.B., M.S., Hunter College; Ed.D., Fordham University.
- KOPLIN, BRUCE M. (1964) *Assistant Professor and Director, Anderson Gallery*
B.F.A., M.F.A., Virginia Commonwealth University.
- KOPPANY, JOANN (1973) *Instructor in Painting and Printmaking*
B.A., M.A., M.F.A., University of California.
- KOTLAN, GEORGE F. (1973) *Instructor in Information Systems*
B.S., Case Western Reserve University; M.C., University of Richmond.
- KOVIT, LEONARD (1972) *Instructor of Sociology and Anthropology*
B.A., Queens College, City University of New York; M.A., Duke University.
- KRISLER, DONALD J. (1973) *Professor of Psychology*
A.B., Bellarmine College; Ph.D., University of Illinois.
- KULESZA, VALERIE (1971) *Assistant Professor of Education*
Ed.B.A., Annhurst College; M.Ed., Virginia Commonwealth University.
- LABAN, LAWRENCE F. (1971) *Assistant Professor of English*
B.A., The City College of New York; Ph.D., Indiana University.
- LAHEY, V. MICHAEL (1971) *Assistant Professor of Education*
A.A., University of Florida; B.S., Florida Atlanta University; M.A., Ed.D., University of Georgia.
- LAMBERT, JOHN D. (1955) *Associate Professor and Assistant Dean, School of Business*
B.S., Virginia Commonwealth University; M.S., Virginia Polytechnic Institute and State University; Ph.D., University of Michigan.
- LANDIS, ALAN L. (1968) *Associate Professor and Chairman, Department of Art Education*
B.S., Indiana University; M.Ed., D.Ed., Pennsylvania State University.

- LANE, LIONEL C. (1966)*Professor of Social Work*
B.A., Long Island University; M.S. in Ed., College of the City of
New York; M.S.S.W., Columbia University; D.S.W., University of
Pennsylvania School of Social Work.
- LASSITER, ROBERT A. (1972)*Associate Professor of*
Rehabilitation Counseling
B.S., Murray State College; M.A., George Peabody College; Ph.D.,
University of North Carolina.
- LAVELY, PHILIP (1973)*Assistant Professor in Recreation/*
Urban and Regional Planning
B.S.F., M.S., University of Georgia.
- LAWES, ROBERT C., JR. (1966)*Associate Professor of Music*
B.M., Henderson State Teachers College (Arkansas); M.M., Ph.D.,
North Texas State University.
- LAWLOR, HAROLD J. (1972)*Assistant Professor of Real Estate*
B.S., Hofstra University; M.S., University of Richmond.
- LEAKE, ESTELLE M. (1972)*Instructor in Education*
(Learning Resources Center)
B.S., M.Ed., Virginia Commonwealth University.
- LECKIE, SHEILA (1972)*Instructor in Elementary Education*
B.S., M.Ed., Virginia State College.
- LEE, DOROTHY E. (1960)*Professor of Business Education and*
Office Administration
B.S., M.S., Albany State University; Ph.D., New York University.
- LEFELHOCZ, JOHN F. (1967)*Assistant Professor of Chemistry*
B.S., Ph.D., University of Notre Dame.
- LENIHAN, MEREDITH ANNE (1972)*Instructor in Fashion Design*
B.F.A., M.A.T., Rhode Island School of Design.
- LENTON, STEPHEN M. (1970)*Instructor in Education and*
Assistant Dean of Student Life
B.A., University of California; M.Ed., Virginia Commonwealth Uni-
versity.
- LEON, MARILYN (1973)*Instructor in Crafts*
B.F.A., Stephen College; M.F.A., Cranbrook Academy of Art.
- LEWIS, ALLEN NELSON (1970)*Instructor in Art Education*
B.S., Hampton Institute; M.A.E., Virginia Commonwealth University.
- LIEBERMAN, IRA (1972)*Assistant Professor of Music*
B.A., M.A., Ph.D., Columbia University.
- LIEBERMAN, LINDA (1972)****Instructor in Music*
B.A., State University of New York.

- LINARES, JUAN F. (1968) *Assistant Professor of Engineering*
B.S., Ph.D., University of Havana (Cuba).
- LINDER, FREDERIC (1973) *Assistant Professor of Education*
B.A., University of Miami; M.A., New School of Social Research,
New York; Ph.D., State University of New York at Buffalo.
- LINDSEY, JAMES E., JR. (1970) *Assistant Professor of Philosophy
and Religious Studies*
B.S., University of Richmond; B.D., Th.M., Th.D., Union Theological
Seminary.
- LINN, MICHAEL D. (1972) *Instructor in English*
B.A., M.A., University of Montana; M.A., University of Minnesota
- LLEWELLYN, GERALD C. (1969) *Assistant Professor of Biology and
Biology Education*
B.S., Frostburg State College; M.S., Ph.D., Purdue University.
- LOCKARD, EARL N. (1969) *Associate Professor of English*
A.B., M.A., University of Illinois; Ph.D., University of Chicago.
- LOHR, C. MICHAEL (1966) . . *Assistant Professor of Mathematical Sciences*
B.S., M.Ed., Ed.D., University of Virginia.
- LOHUIS, ARDYTH (1969) *Assistant Professor of Sacred Music*
B.S.M., Illinois Wesleyan University; M.M., Northwestern University;
Ph.D., Cincinnati College Conservatory of Music, University of Cin-
cinnati.
- LOLLEY, THOMAS LANE (1970) *Assistant Professor of Education*
B.A., M.Ed., Northeast Louisiana State College.
- LONDONER, CARROLL A. (1972) . . *Assistant Professor of Adult Education*
B.A., UCLA, B.D., San Francisco Theological Seminary; M.A., Ph.D.,
Indiana University.
- LONGEST, GEORGE C. (1963) *Assistant Professor of English*
B.A., M.A., University of Richmond; Ph.D., University of Georgia.
- LONNES, JEROME LEROY (1970) *Assistant Professor of Philosophy
and Religious Studies*
B.A., Carleton College; M.A., Ph.D., Emory University.
- LOOMER, E. COFER (1961) *Assistant Professor of Business
and Coordinator, Management Center*
B.S., M.S., Virginia Commonwealth University.
- LOONEY, JAMES R. (1964)** *Assistant Professor of Mass
Communications*
B.S., East Tennessee State University; M.S., Virginia Common-
wealth University.

**On educational leave

- LOWERY, DIANE M. (1970)*Instructor and Assistant Director of Admissions*
B.S., M.Ed., Virginia Commonwealth University.
- LUBMAN, MELVIN V. (1968)*Assistant Professor of Psychology*
B.A., University of Richmond; M.A., New York University.
- LYLE, JOHN D. (1967)*Instructor in History*
A.B., Pfeiffer College; M.A., Ph.D., University of South Carolina.
- LYLES, ALBERT MARION (1970)*Professor of English and Associate Dean, School of Arts and Sciences*
A.B., Union College; A.M., University of Pennsylvania, Ph.D., Rutgers-The State University.
- MADDEN, BONITA J. (1972)*Instructor in Education*
B.A., M.Ed., Boston University.
- MADDEN, PETER (1973)*Assistant Professor of Education*
A.B., Southeastern Missouri State College; M.A., Newark State College; Ed.D., Rutgers-The State University.
- MADISON, TERRY M. (1972)*Instructor in Social Work*
B.A., University College, New York University; M.S.W., Columbia University, School of Social Work.
- MAGILL, G. DAVE (1962)*Assistant Professor of Physical Education*
B.S., Virginia Commonwealth University; M.Ed., University of Virginia.
- MAGISTRO, CHARLES J. (1967) ...*Assistant Professor of Communication Arts and Design*
B.F.A., Carnegie Institute of Technology; M.F.A., Ohio State University.
- MAHONEY, JOHN M. (1971)*Assistant Professor of Psychology*
B.S., Michigan State University; Ph.D., State University of New York at Buffalo.
- MAHONY, JOSEPH (1973)*Assistant Professor of Education*
B.A., M.Ed., Ed.D., Boston University.
- MANGUM, ANTHONY B. (1971)*Instructor in English*
A.B., University of North Carolina; M.A., University of South Carolina.
- MANSFIELD, VIRGIL C. (1967)*Instructor in Business and Coordinator, Management Center*
B.S., M.S., Virginia Commonwealth University.
- MAPP, JOHN A. (1964)*Associate Professor of Education and Director, Evening College and Summer Sessions*
B.A., College of William and Mary; M.A., New York University.

- MARICLE, KENNETH E. (1971) *Associate Professor of Marketing*
B.S.B.A., University of Kansas; M.B.A., University of Denver; D.B.A.,
Arizona State University.
- MARIONI, ROBERT J. (1971) *Instructor in Accounting*
B.S., M.B.A., Pennsylvania State University.
- MARKHAM, ROBERT C. (1962) *Assistant Professor of English*
B.A., M.A., LL.B., J.D., University of Richmond.
- MARLOW, JOHN (1973)*** *Instructor in Music*
B.M., American University.
- MARONICK, THOMAS J. (1966)** *Instructor in Business*
B.A., Seminary of the Northwest (Washington); M.S.B.A., Univer-
sity of Denver.
- MARTA, RONALD S. (1971) *Assistant Professor of French*
B.A., University of St. Thomas (Texas); M.A., Université Laval
(Canada); Ph.D., University of Chicago.
- MARTIN, BERNARD M. (1960) *Associate Professor of Painting*
and Printmaking
B.F.A., Virginia Commonwealth University; M.A., Hunter College.
- MARTIN, ELIZABETH I. (1972) *Instructor in Theatre*
B.F.A., Virginia Commonwealth University.
- MARTIN, ROBERT J. (1971) *Instructor in Communication Arts*
and Design
B.F.A., Minneapolis School of Art; M.F.A., Indiana University.
- MASON, NOVEL M. (1968) *Instructor in Interior Design*
B.A., North Carolina State University.
- MATTHEWS, ALFRED T. (1970) *Assistant Professor of Education*
B.A., M.A., Colorado State College; Ph.D., Indiana University.
- MATTIA, ALPHONSE (1973) *Instructor in Crafts*
B.F.A., Philadelphia College of Art; M.F.A., Rhode Island School
of Design.
- MAY, MARGARET L. (1955) *Associate Professor of Biology*
B.S., American University; M.S., George Washington University.
- McCANLESS, ROSAMOND (1938) .. *Associate Professor and Archivist and*
Special Collections Librarian
A.B., Converse College; A.B., in Library Science and M.A., Univer-
sity of North Carolina; Seminar in Greece.
- McCARTHA, ALICE (1969) *Professor of Education*
B.Ed., Illinois State University; M.A., University of Illinois; Ed.D.,
University of Florida.

**On educational leave

***Part-time

- McCRAy, JOHN H. (1973) *Associate Professor of Accounting*
B.S., University of Virginia; Ph.D., University of Georgia.
- McCREEDY, KENNETH R. (1972) *Assistant Professor of Administration*
of Justice and Public Safety
A.A., Orange Coast College; B.S., California State College at Long
Beach; M.P.A., University of Southern California.
- McCULLOUGH, JAMES P., JR. (1972) *Assistant Professor of Psychology*
B.A., Louisiana State University; B.D., Southern Methodist Univer-
sity; M.S., Ph.D., University of Georgia.
- McDONALD, RICHARD MICHAEL (1971) *Instructor in Administration*
of Justice and Public Safety
B.S., M.S., Central Missouri State College.
- McGEARY, KATHRYN M. (1965) *Assistant Professor of Retailing*
B.S., North Dakota State University; M.S., New York University.
- McGHAN, BARBARA H. (1973) *Instructor in Philosophy*
B.A., Virginia Commonwealth University; M.A., University of Vir-
ginia.
- McGHAN, HARLAN P. (1968) *Assistant Professor of Philosophy*
and Religious Studies
B.A., Michigan State University; M.A., Princeton University.
- McGRATH, JOHN H., III (1971) *Professor of Sociology*
and Anthropology and Chairman, Department
of Sociology and Anthropology
B.A., Albright College; M.A., Ph.D., Rutgers—The State University.
- McINTYRE, EARL A. (1972) *Professor of Mass Communications*
B.S., University of Missouri; M.S., Northwestern University.
- McKEEVER, PATRICK (1972) *Instructor in Education*
B.A., M.S., Canisius College.
- McLEOD, ALAN M. (1969) *Assistant Professor of Education*
B.A., Washington and Lee University; M.Ed., Ed.D., University of
Virginia.
- McLEOD, CHARLES (1970) *Instructor and Admissions Counselor*
B.S., Virginia Commonwealth University.
- McNAMARA, ALEXANDER (1971) *Assistant Professor of German*
B.A., Kenyon College; M.A., Ph.D., Indiana University.
- McNEIL, JANET K. (1972) *Instructor and Assistant Reference Librarian*
B.A., Denver University, M.A. in Library Science, Denver University.
- MEDLEY, REGINA C. (1967)** *Assistant Professor of Crafts*
B.S., M.F.A., Bowling Green State University.

**On educational leave

- MEDNICK, MELVIN (1972) *Associate Professor of Sociology and Anthropology*
B.S., Temple University; M.A., Ph.D., University of Chicago.
- MEGGS, PHILIP (1968) *Assistant Professor of Communication Arts and Design*
B.F.A., Virginia Commonwealth University.
- MEHARG, EDWARD L. (1967) .. *Assistant Professor of Information Systems*
B.A., University of Nevada; M.A., University of California.
- MERCER, RICHARD W. (1973) *Assistant Professor of English*
A.B., University of Michigan; M.A., University of Chicago; Ph.D., Syracuse University.
- MESSMER, MICHAEL W. (1972) *Assistant Professor of History*
A.B., University of Notre Dame; M.A., Ph.D., Yale University.
- MEYER, C. JAMES (1973) *Instructor in Crafts*
B.A., State University of New York; M.F.A., State University College.
- MEYER, EDWARD R. (1972) *Assistant Professor of Biology*
A.B., Indiana University; M.S., University of Louisville; Ph.D., Arizona State University.
- MILLER, ARTHUR WAYNE (1970) .. *Assistant Professor of Art Education*
B.A., William Jewell College; M.A., University of Missouri; D.Ed., University of Kansas.
- MILLER, ELBERT G., JR. (1973) *Assistant Professor of Quantitative Management*
B.S., M.A., University of Alabama.
- MILLER, ELDON S. (1972) *Associate Professor of Urban Studies*
B.A., M.A., Ph.D., George Washington University.
- MILLER, JAMES B. (1971) *Instructor in Painting and Printmaking*
Diploma, A.D., Leads College of Art; M.F.A., University of Arkansas.
- MILLER, MICHAEL JAMES (1970)** ... *Assistant Professor of Sociology*
B.S., M.A., University of Louisville; Ph.D., University of Kentucky.
- MILLS, RICHARD R. (1971) *Professor of Biology*
B.A., Emory and Henry College; M.S., Ph.D., Virginia Polytechnic Institute and State University.
- MINOCK, LARRY D. (1971) *Instructor in Geography*
B.A., M.A., University of Michigan.
- MINTON, PAUL D. (1972) *Professor of Mathematical Sciences and Biometry and Dean, School of Arts and Sciences*
B.S., M.S., Southern Methodist University; Ph.D., North Carolina State University.

**On educational leave

- MIRR, EDWARD A. (1960) *Assistant Professor of Music*
B.A., Queens College; M.A., Teachers College, Columbia University.
- MITCHELL, SANDRA T. (1973) *Assistant Professor of Social Work*
B.A., University of Illinois; M.S.W., University of Illinois.
- MOESER, JOHN V. (1970) *Assistant Professor of Urban Studies*
B.A., Texas Tech University; M.A., University of Colorado.
- MOFFETT, E. ALBERT (1971)*** *Instructor in Mass Communications*
B.S., University of Florida.
- MONGER, SUE A. (1973) *Instructor in Art History*
B.A., Duke University; M.A., Indiana University.
- MONTAGUE, ANNE M. (1963) *Assistant Professor of Social Work*
A.B., Meredith College; M.S.S.W., Virginia Commonwealth University.
- MONTONI, HOPE HALEY (1973)*** *Instructor in Music*
B.M.E., Hartt College; M.M., Kent State University.
- MOORE, JAMES, III (1970)*** *Instructor in Music*
- MOORE, JAMES T. (1970) *Assistant Professor of History*
B.A., University of South Carolina; M.A., Ph.D., University of Virginia.
- MORGAN, MICHAEL (1974)*** *Instructor in Music*
Diploma, Curtis Institute of Music.
- MORONI, PAULINE (1967) *Instructor in Education and Counselor*
B.S., Madison College; M.S., Eastern Illinois University.
- MORRIS, DOUGLAS K. (1970) *Assistant Professor of English*
B.A., David Lipscomb College; M.A., Ph.D., University of Tennessee.
- MORRIS, JOSEPH R. (1969) *Assistant Professor of Mathematical Sciences*
B.S., M.S., Virginia Polytechnic Institute and State University;
M.A., Ph.D., University of Alabama.
- MOSLEY, RONALD B. (1973) *Assistant Professor of Physics*
A.B., Berea College; M.S., Ph.D., Auburn University.
- MOSZER, MAX (1970) *Professor of Economics*
A.B., A.M., Ph.D., University of Pennsylvania.
- MOTT, JONATHAN (1974)*** *Instructor in Music*
Oberlin Conservatory of Music.
- MOYLE, SUSAN M. (1972) *Assistant Professor of Biology*
B.A., Carleton College; Ph.D., University of Tennessee.
- MULLER, JOAN (1971) *Instructor and Slide Librarian*
A.B., Goucher College.

- MUNJAS, BARBARA A. (1972) *Associate Professor of Nursing and Sociology*
B.S., M.S., Ohio State University; M.A. Ph.D., University of Pennsylvania.
- MUNRO, GEORGE E. (1971) *Assistant Professor of History*
B.A., Wheaton College; Ph.D., University of North Carolina.
- MURDOCK, ROBERT W. (1969) *Assistant Professor of Mathematical Sciences*
A.B., Syracuse University; M.A., East Tennessee State University.
- MURPHY, BERNARD (1969) *Assistant Professor of Sociology*
B.A., St. Mary's University (Halifax); M.S., Boston University; Ph.D., Wayne State University.
- MURRILL, MALCOLM L. (1948) *Associate Professor of Mathematical Sciences*
B.A., Yale University; M.S., University of Richmond.
- MYATT, BARBARA (1973) *Assistant Professor of Education*
B.S., University of Maine; M.A., Florida State University.
- MYERS, CAROLYN WADE (1970) *Instructor and Serials Librarian*
B.A., University of Florida; M.L.S., Peabody Graduate Library School.
- NAN, GEORGE D. (1963) *Associate Professor of Photography and Chairman, Department of Photography*
B.F.A., Rochester Institute of Technology; M.S., Illinois Institute of Technology.
- NAY, ROBERT W. (1971) *Assistant Professor of Psychology*
B.A., Florida Presbyterian College; M.S., Ph.D., University of Georgia.
- NELSON, CECILIA C. (1973) *Assistant Professor of Sociology*
B.S., University of Alabama; M.S., Ph.D., Ohio State University.
- NELSON, FRANCIS C. (1967) *Associate Professor of History*
B.A., Maurus College, Hungary; M.A., Ph.D., University of Budapest; Doctoral Degree in Law and Political Science, Francis Joseph State University.
- NELSON, LYNN D. (1972) *Assistant Professor of Sociology and Anthropology*
B.A., Abilene Christian College; M.A., University of Alabama; Ph.D., Ohio State University.
- NEUMANN, MARGARETTA R. (1952) *Associate Professor of Social Welfare*
Ph.B., University of Chicago; M.A., School of Social Service Administration, University of Chicago.
- NEWBURG, EDWARD A. (1970) *Associate Professor of Mathematical Sciences*
B.S., M.S., Purdue University; Ph.D., University of Illinois.

- NEWDICK, RICHARD L. (1966) *Assistant Professor of Theatre*
B.A., University of Maine; M.A., University of North Carolina.
- NEWELL, KENNETH B. (1971) *Associate Professor of English*
B.A., Lowell Technical Institute; A.M., Columbia University; Ph.D.,
University of Pennsylvania.
- NEWTON, J. WAYNE (1971) *Professor of Social Welfare and*
Urban Studies
A.B., Wesleyan University; M.A., New York University; M.A.S.A.,
Ohio State University; Ph.D., Brandeis University.
- NOBLE, CECILE E. (1966) *Assistant Professor of French*
B.S., Virginia Commonwealth University; Sorbonne, Paris, France;
M.A., University of Richmond; Ph.D., University of Virginia.
- NOE, CHARLES WARREN (1970) *Professor of Physical Education*
B.S., University of Virginia.
- NORTH, HAROLD E. (1965) *Associate Professor and Chairman,*
Department of Sculpture
B.F.A., Rhode Island School of Design; M.F.A., Virginia Common-
wealth University.
- O'BANNON, JOHN A. (1965)*** *Instructor in Music*
B.M., Illinois Wesleyan University.
- ODUM, LINDA L. (1973) *Assistant Professor in Recreation*
B.S., M.S., Ph.D., Florida State University.
- OEHLER, JOHN S. (1970) *Assistant Professor of Education*
B.A., Davidson College; M.A.T., Ph.D., University of North Carolina.
- OSLUND, MARGARET G. (1973) *Professor of Urban Studies*
A.B., M.P.A., Syracuse University; D.P.A., University of Southern
California.
- OSTROW, ELLEN K. (1964) *Assistant Professor of Social Work*
B.S., University of Pittsburgh; M.S.S., Smith College School for
Social Work.
- O'TOOLE, DENNIS (1967) *Assistant Professor of Economics*
B.A., College of William and Mary; M.S., Virginia Commonwealth
University; Ph.D., Ohio University.
- OTTENBRITE, RAPHAEL M. (1967) *Associate Professor of Chemistry*
B.S., M.S., Assumption University; Ph.D., University of Windsor.
- OWENS, CHARLES E. (1971) *Counselor and Assistant Professor*
of Education
B.A., West Virginia State College; M.A., West Virginia University;
Ed.D., University of New Mexico.
- OWENS, OTIS H. (1971) *Instructor and Advisor in General Studies*
B.A., Taladega College, M.A., Syracuse University.

- OZMON, HOWARD A., JR. (1970) *Professor of Education*
A.B., University of Virginia; M.A., Ed.D., Columbia University.
- PAGELS, JOHN F. (1969) *Assistant Professor of Biology*
B.S., Central Michigan University; M.S., Ph.D., Tulane University.
- PANICI, SANDRA K. (1970) *Instructor in English*
B.A., Millikin University; M.A., University of Kansas.
- PARASHAR, OM DATT (1973) *Assistant Professor of Education*
M.A., Panjab University; M.Ed., University of Toronto; Ed.D., University of Cincinnati.
- PARKER, CHERYL L. (1973) *Instructor in English*
A.B., San Diego State College.
- PARKER, JACQUELINE (1973) *Assistant Professor in Social Welfare*
B.A., M.S.W., D.S.W., University of California.
- PARKER, LOIS E. (1969) *Instructor in Information Systems*
B.S., Purdue University; M.A., Michigan State University.
- PARKER, OSBORNE B. (1969) *Associate Professor of Education and Director, Counseling Center*
B.S., Purdue University; M.S., Indiana University; Ed.D., Michigan State University.
- PARKER, RONALD D. (1969) *Assistant Professor of Biology*
B.S., M.S., University of Illinois; Ph.D., Brigham Young University.
- PASIERB, LEONARD G. (1963) *Assistant Professor of Sociology*
B.S., Arkansas State College (Jonesboro); M.S., Trinity University (San Antonio, Texas).
- PATTEN, JUDITH L. (1973) *Instructor in Physical Education*
B.S., Western Michigan University, M.A.; Central Michigan University.
- PAYNE, F. DANA (1970) *Assistant Professor and Coordinator of Academic Advising*
A.B., Princeton University.
- PEARSON, ELLEN D. (1969) *Instructor and Director of Student Financial Aids*
B.S., South Carolina State College.
- PENDLETON, JAMES D. (1958) *Associate Professor of English*
B.S., Davidson College; M.A., University of North Carolina.
- PENNINGTON, BECKY (1973)*** *Instructor in Physical Education*
A.B., Gettysburg College.
- PENNINGTON, JUDE COLE (1970) *Instructor in Physical Education*
B.S., Lock Haven State Teachers College; M.Ed., Temple University.

- PEOPLES, NAPOLEON (1970) *Counselor and Assistant Professor of Education*
B.A., Wilburforce University; M.Ed., Ed.S., Kent State University.
- PEPLE, EDWARD C., JR., (1969) *Assistant Professor of English*
B.A., University of Richmond; M.A., Ph.D., University of Virginia.
- PERRY, REGENIA A. (1967) *Associate Professor of Art History*
B.S., Virginia State College; M.A., Ph.D., Western Reserve University.
- PERRY, VINCENT (1972) *Assistant Professor of Social Welfare*
B.S., Hampton Institute; M.S.W., Syracuse University.
- PETRELLO, GEORGE J. (1974) *Associate Professor and Chairman, Department of Business Education and Office Administration*
B.A., Montclair State College; M.B.A., Seton Hall University; Ph.D., New York University.
- PFEIFER, CARL (1965) *Associate Professor of Music*
B.S., Juilliard School of Music; M.M., University of Miami (Florida).
- PFEIFER, DOROTHY (1966)*** *Instructor in Music*
B.M., Augustana College.
- PHELPS, PHIL R. (1969) *Assistant Professor of English*
B.A., M.A., University of Tennessee; Ph.D., University of New Mexico.
- PHELPS, ROBERT C. (1973) *Assistant Professor in Administration of Justice and Public Safety*
B.Ed., Chicago State University; M.S., Southern Illinois University.
- PICHERIT, JEAN-LOUIS G. (1969) *Assistant Professor of French*
Diploma, Ecole Superieure de Commerce et d'Administration des Entreprises (France); M.A., University of Nebraska; Ph.D., University of North Carolina.
- PLATZ, ANNA E. (1968) *Instructor in German*
B.A., Adelphi University; M.A., Columbia University.
- POGANY, PETER P. (1969) *Assistant Professor of Economics*
Diploma, Hungarian University of Economics; M.A., University of Pennsylvania; Doctor of Economics, Hungarian University of Economics.
- POLLAK, THERESA (1928)† *Professor Emerita of Painting and Printmaking*
B.S., University of Richmond; Harvard University (one summer); New York Art Students' League (four years); Hans Hofmann School of Art (one summer).

†Retired June, 1969.

***Part-time

- POOLE, ROGER CLIFTON (1970)****Assistant Professor of Finance and Insurance*
A.B., The Citadel; M.B.A., University of South Carolina; F.L.M.I.
- PORACH, LEE B. (1970)*Counselor and Instructor in Education*
A.B., William and Mary; M.Ed., Ed.D., University of Virginia.
- POTTS, SHERRY (1972)*Instructor in Art Education*
B.F.A., University of Georgia; M.A.Ed., Virginia Commonwealth University.
- POWELL, THOMAS J. (1973)*Visiting Associate Professor of Social Work*
B.S., M.S.W., Boston College; D.S.W., Smith College.
- PRESTON, DAVID G. (1972)*Assistant Professor of Psychology*
B.S., Tulane University; Ph.D., Louisiana State University.
- PRIEBE, RICHARD K. (1973)*Assistant Professor of English*
B.A., Franklin & Marshall College; M.A., University of Michigan; Ph.D., University of Texas, Austin.
- PROSS, H. LAURIE (1973)*Instructor in French*
B.A., Virginia Commonwealth University; M.A., University of Virginia.
- PROSSER, WILLIAM L. (1970)*Assistant Professor of Theatre*
A.B., Williams College; M.A., Purdue University.
- QUARTERMAN, DALE L. (1969)*Instructor in Photography*
B.F.A., University of Georgia; M.S., Institute of Technology in Illinois.
- QUINN, ELAINE H. (1971)*Instructor in Education*
B.A., Rosemont College; M.Ed., Virginia Commonwealth University.
- RAMSEY, HENRY S. (1973)*Instructor in Accounting*
B.S., M.B.E., Morehead State University.
- RAPHAEL, FRANCES B. (1973)*Assistant Professor of Social Work*
B.A., New York University; M.S.W., University of Pennsylvania.
- RAY, WILLIAM SAMUEL (1970) ...*Professor of Psychology and Chairman, Department of Psychology*
B.A., Bridgewater College; M.A., Ph.D., University of Maryland.
- RAYCHOWDHURY, PRATIP N. (1969)*Associate Professor of Mathematical Sciences*
B.S., University of Calcutta; B.A., University College (Calcutta); M.S., Brigham Young University; Ph.D., George Washington University.
- REED, JAMES R., JR. (1968)*Associate Professor of Biology*
A.B., Harvard University; M.S., Cornell University; Ph.D., Tulane University.

- RENICK, CHARLES R. (1953)*Professor of Sculpture*
B.F.A., M.F.A., Virginia Commonwealth University.
- REYNOLDS, ELIZABETH R. (1967)*Associate Professor of English*
B.A., Winthrop College; M.A., Columbia University; Ph.D., University of South Carolina.
- REYNOLDS, JOHN D. (1967)*Associate Professor of Biology*
B.S., M.Ed., Temple University; Ph.D., University of South Carolina.
- RHONE, HENRY G. (1970) ..*Instructor and Assistant Dean of Student Life*
B.A. Amherst College; M.Ed. Virginia Commonwealth University.
- RICHARDS, WALTER L., JR. (1951)*Associate Professor of Biology*
B.S., Virginia Military Institute; M.A., University of Virginia.
- RIMLER, GEORGE WARREN (1970) ..*Associate Professor of Management*
B.S.M.E., Polytechnic Institute of Brooklyn; M.B.A., D.B.A., Georgia State University.
- RIVERS, RICHARD (1969)*Associate Professor of Music*
B.S., Juilliard School of Music; M.A., George Peabody College.
- ROACH, J. KENNETH (1961)*Professor of Business Administration*
and Office Administration
A.B., Duke University; M.A., Columbia University; Ed.D., New York University.
- ROBERTSON, NEALE M. (1968)*Assistant Professor of*
Quantitative Management
B.S., M.S., Virginia Commonwealth University.
- ROBINSON, J. LAWRENCE (1959)*Assistant Professor of Organ*
A.B., University of South Carolina; M.M., University of Michigan.
- ROGERS, ALBERT A. (1946)*Professor of History*
B.A., University of Richmond; B.S., M.A., Ph.D., University of Virginia.
- ROGERS, RONALD H. (1972)*Associate Professor of Administration*
of Justice and Public Safety
B.S., Florida State University; M.S., Michigan State University; M.P.A., University of Southern California.
- ROSE, GUY (1973)*Assistant Professor of Education*
B.S., Appalachian State University; M.A., Eastern Carolina University; Ed.D., George Peabody College for Teachers.
- ROTHENBERG, ELAINE Z. (1960)*Professor of Social Work and*
Dean, School of Social Work
A.B., Queens College; M.S.S., Smith College School for Social Work.
- ROUSE, VIRGINIA A. (1965)*Coordinator, Community Music School*
B.M. (Music Education), B.M. (Violin), M.M., Florida State University.

- ROYSER, ELIZABETH S. (1964)*Instructor in Physical Education*
B.S., M.Ed., Virginia Commonwealth University.
- RUBIN, HARVEY W. (1972)*Assistant Professor of Insurance*
B.B.A., M.A.S., Ph.D., Georgia State University.
- RUCK, CHARLES P. (1974)*Associate Professor and Associate*
Dean, School of Education
B.A., College of Wooster; M.A., Ph.D., Northwestern University.
- RULE, WARREN R. (1972)*Assistant Professor of*
Rehabilitation Counseling
A.B., Pfeiffer College; M.A., Appalachian State University; Ph.D.,
University of South Carolina.
- RUSSELL, DOJELO C. (1965)*Associate Professor of Social Work*
B.A., University of Arkansas; M.S.W., Tulane University School of
Social Work; D.S.W., Catholic University of America.
- RUSSELL, MILO F. (1957)*Assistant Professor of Painting*
and Printmaking
B.F.A., Virginia Commonwealth University; M.A., University of Vir-
ginia.
- RYLAND, ANNE P. (1962)****Instructor in Interior Design*
B.A., Westhampton College; Parsons School of Design.
- SAGAY, ANIREJUORITSE (1972)*Assistant Professor of Economics*
B.S., University of Lagos (Nigeria); M.A., University of Pittsburgh.
- SAMSEL, GENE L., JR. (1971)*Assistant Professor of Biology*
B.S., University of Kentucky; M.S., Morehead State University;
Ph.D., Virginia Polytechnic Institute and State University.
- SANGE, GARY R. (1973)*Assistant Professor of English*
A.B., M.A., San Francisco State College; M.F.A., University of Iowa.
- SANSING, RAYMOND C. (1972)*Assistant Professor of*
Mathematical Sciences
B.S., M.S., Ph.D., Southern Methodist University.
- SAUER, DAVID (1964)****Instructor in Painting and Printmaking*
B.F.A., Richmond Professional Institute; M.A., Columbia University.
- SAUNDERS, DAVID N. (1972)*Assistant Professor of Social Work*
B.A., Dartmouth College; M.S.W., University of Michigan, School
of Social Work.
- SAUNDERS, J. ROY JR. (1973)*Visiting Assistant Professor in*
Administration of Justice and Public Safety
B.C.P., University of Virginia; M.A., George Washington University.
- SAVAGE, JOHN D. (1972)*Assistant Professor of Music*
B.S., M.M., East Carolina University.

- SCALIN, CHARLES B. (1968) *Assistant Professor of Communication Arts and Design*
B.F.A., Art Institute of Chicago; M.F.A., Pratt Institute.
- SCHANTZ, ALAN PAUL (1970) *Instructor in Art Education*
B.A., Muhlenberg College; M.Ed., Temple University.
- SCHATZKY, SIDNEY A. (1968) *Assistant Professor of Communication Arts and Design*
B.F.A., Rochester Institute; M.F.A., Pratt Institute.
- SCHEDLER, DAVID A. (1969) *Assistant Professor of Mathematical Sciences*
B.S., M.S., Oklahoma State University; Ph.D., George Washington University.
- SCHILTZ, JACK H. (1969) *Assistant Professor of Education*
B.S., M.S., Southern Illinois University; Ed.D., Columbia University.
- SCHOONOVER, ROBERT J. (1973) *Assistant Professor of Education*
B.S., M.S., University of Wisconsin; Ed.D., Kansas University.
- SCHREIBER, MARY (1970) *Associate Professor of Social Work*
B.A., University of Illinois; M.S.W., Washington University (Missouri); Third Year Certificate, University of Chicago.
- SCHRIEBERG, CHARLOTTE S. (1965) .. *Assistant Professor of Social Work*
B.S., Westhampton College; M.S.S.W., Virginia Commonwealth University.
- SCHROETTER, SAMUEL T., JR. (1972) *Instructor in Elementary Education*
A.B., King College; M.A., University of Virginia.
- SCHUBERT, MARGARET (1968)*** *Professor of Social Work*
A.B., University of California; A.M., Ph.D., University of Chicago.
- SCHUETZ, ARNOLD (1970) *Assistant Professor of History*
M.A., Tulane University; Ph.D., University of Wisconsin.
- SCHWABAUER, ROBERT J. (1970) .. *Assistant Professor of Mathematical Sciences*
B.S., M.S., Ph.D., University of Nebraska.
- SCHWARTZBAUM, ALLAN M. (1972) *Associate Professor of Sociology and Anthropology.*
B.A., Harpur College, State University of New York at Binghamton; M.S., Ph.D., Cornell University.
- SCHWARZ, PHILIP J. (1972) *Assistant Professor of History*
A.B., Brown University; M.A., University of Connecticut; M.L.S., Rutgers—The State University; Ph.D., Cornell University.

- SCOTCH, C. BERNARD (1968)Associate Professor of Social Work
B.A., Boston University; M.S.W., University of Pittsburgh; Ph.D.,
Brandeis University.
- SCOTT, LARRY S. (1973)Assistant Professor of Mathematical
Sciences
A.B., Fairbury Jr. College; B.S., M.S., Ph.D., Manhattan State Uni-
versity.
- SCOTT, LINDA P. (1970)Instructor in Information Systems
B.S., M.S., Virginia Commonwealth University.
- SCOTT, RICHARD A. (1968)Associate Professor of Accounting
B.B.A., City University of New York; M.B.A., Columbia University;
M.B.A., Boston University; Ph.D., American University; CPA.
- SCOTT, RONALD J. (1973)Assistant Professor in Administration
of Justice and Public Safety
B.A., Baylor University; M.A. California College at Los Angeles.
- SEE, RUTH D. (1967)Assistant Professor of History
B.A., Mary Baldwin College; M.R.E., New York Theological Semi-
nary; Ph.D., New York University.
- SEGAL, FLORENCE (1968)Assistant Professor of Social Work
B.A., Queens College; M.A., University of Chicago.
- SEIDENBERG, ARTHUR J. (1968)Assistant Professor of Biology
B.S., Brooklyn College; Ph.D., University of Illinois.
- SELLERS, JAMES R.Assistant Professor of Recreation
and Chairman, Department of Recreation
B.S., M.Ed., North Carolina State University; Ed.D., University of
Georgia.
- SHARMAN, CHARLES CHRISTIAN (1971)Assistant Professor of
Education
B.S., Virginia Commonwealth University; M.T.S., College of William
and Mary; Ed.D., University of Virginia.
- SHARP, NICHOLAS A. (1971)Assistant Professor of English
B.A., University of Kansas; M.A., Ph.D., Ohio State University.
- SHARPE, FOREST G. (1972)Instructor in Education
(Learning Resources Center)
B.S., M.A., Virginia Commonwealth University.
- SHARPLEY, JOHN M. (1967)Associate Professor of Biology
B.A., Hampden-Sydney College; M.S., University of Richmond.
- SHARSHAR, ABDELALEEM M. (1970)Assistant Professor of Economics
B.Com., University of Cairo (Egypt); M.A., Williams College; M.Ph.,
Ph.D., George Washington University.

- SHAW, BRADLEY A. (1972)*Instructor in Spanish*
B.A., Lewis & Clark College; M.A., Northwestern University; Ph.D.,
University of New Mexico.
- SHEER, ALAIN H. (1972)*Assistant Professor of Economics*
A.B., Muhlenberg College; M.A., Duke University.
- SHEFFIELD, ROBERT N. (1968) ..*Assistant Professor and Assistant Dean,*
School of Business
B.S., M.S., Virginia Commonwealth University.
- SHERRARD, MARY ALICE (King) (1972)*Reference Librarian*
B.A., American University; M.S., Florida State University.
- SHERRARD, S. McCLUER (1970)*Instructor and Cataloger for Library*
B.A., Roanoke College; M.A.L.S., George Peabody College.
- SHERRON, RONALD H. (1970)*Assistant Professor of Education*
B.S., North Carolina State University; M.Ed., Ph.D., University of
North Carolina.
- SHILES, EUGENE J. (1972)*Assistant Professor of Physics*
B.S., Northern Illinois University; M.A., Ph.D., University of Cali-
fornia at Santa Barbara.
- SHILLADY, DONALD DOUGLAS (1970) ..*Assistant Professor of Chemistry*
B.S., Drexel University; M.A., Princeton University; Ph.D., University
of Virginia.
- SIDDIQUI, JUNAID A. (1973)*Instructor in Chemistry*
B.S., Karachi University, Pakistan; M.S., University of Western On-
tario, Canada; Ph.D., University of Cincinnati.
- SIEFKE, THOMAS C. (1970)*Assistant Professor of Crafts*
B.F.A., M.F.A., Bowling Green State University.
- SIGLER, CHARLES O. II (1968)*Instructor in Fashion Design*
B.F.A., Virginia Commonwealth University.
- SILVERS, STUART J. (1973)*Associate Professor of Chemistry*
B.A., Swarthmore College; Ph.D., Yale University.
- SIMPSON, DOROTHY (1969)*Assistant Professor of Art Education*
B.A., Alabama College; M.A., University of Alabama; D.Ed., Penn-
sylvania State University.
- SIN, BETTY (1973)*Catalog Librarian*
B.A., National Chegchi University; M.L.S., Emory University.
- SINGH, B. KRISHNA (1969)*Assistant Professor of Sociology*
B.S., University of Gorakhpur (India); M.S., University of Bhagalpur
(India); M.S., University of Guelph (Canada); Ph.D., University of
Kentucky.
- SINGLETARY, MICHAEL W. (1972)*Instructor in Mass Communications*
B.A., M.A., University of South Carolina; Ph.D., Southern Illinois
University.

- SLATER, MERLE V. (1966) *Assistant Professor of Business*
B.S.B.A., Washington University (St. Louis); M.A.Ed., University of
Florida.
- SLEEMAN, WILLIAM C. (1972) *Instructor in Education*
(*Learning Resources Center*)
B.S., Virginia Commonwealth University.
- SLOOPE, BILLY W. (1968) *Professor of Physics*
and Chairman, Department of Physics
B.S., University of Richmond; M.S., Ph.D., University of Virginia.
- SMETANA, FRANTISEK (1973)*** *Instructor in Music*
Diploma, Prague Conservatory; Diploma, Ecole Normale de Musique.
- SMITH, DONALD L. (1968) *Instructor in English and Assistant Director*
of Admissions
B.A., Virginia Commonwealth University; M.Ed., University of Rich-
mond.
- SMITH, HAMPDEN H., III (1973)*** .. *Instructor in Mass Communications*
B.A., Randolph Macon College; M.A., Boston University.
- SMITH, L. WINSTON (1963) *Instructor in History*
B.A., M.A., University of Richmond.
- SNELLINGS, ELEANOR C. (1968) *Associate Professor of Economics*
A.B., M.A., University of North Carolina; Ph.D., Duke University.
- SOLOMON, JACK D. (1967) *Assistant Professor of Painting*
and Printmaking
B.A., San Diego State College; M.A., San Francisco State College.
- SOLOMON, PAUL J. (1974) *Assistant Professor of Marketing*
B.S.B.A., M.B.A., University of Denver; D.B.A., Arizona State
University.
- SPARKS, HOWARD L. (1966) *Professor of Education and*
Assistant Vice-President for Continuing Education
A.B., College of William and Mary (Norfolk); M.A., Ed.D., Teachers
College, Columbia University.
- SPARKS, KENNETH R. (1973)*** *Associate Professor of Mass*
Communications
B.S., M.S., Ph.D., Syracuse University; J.D., George Washington
University.
- SPENCER, NANCY J. (1973) *Assistant Professor of Psychology*
B.A., Boston University; M.S., Ph.D., Pennsylvania State University.
- SPERRY, JOHN B. (1971) *Associate Professor of Accounting*
B.S., New York University; M.B.A., University of Pennsylvania;
Ph.D., American University; CPA.

- SPINELLI, MICHAEL A. (1969) *Assistant Professor of Quantitative Management*
B.A., Ph.D., West Virginia University.
- STACKHOUSE, KENNETH A. (1971) *Assistant Professor of Spanish*
B.A., Drew University; M.A., Ph.D., University of Florida.
- STAUSS, NYLES (1973) *Assistant Professor of Education*
B.S., Lakeland College; M.S., Ph.D., University of Wisconsin-Madison.
- STEINKE, CAROLE C. (1972) *Instructor in Fashion Design*
B.S., University of Chicago.
- STEVENS, JOSEPH LEOPOLD (1970) *Associate Professor of Political Science and Urban Studies*
Ju.D., University of Vienna (Austria); M.C.L., George Washington University.
- STEWART, WILLIAM R. (1973) *Professor of Art and Director of Graduate Studies, The School of the Arts*
B.F.A., Maryland Institute of Fine Arts; M.Ed., Loyola College; D.Ed., The Penn State University.
- STINCHCOMB, JAMES D. (1971) *Associate Professor, Administration of Justice and Public Safety and Chairman of Department*
B.S., M.A., University of Pittsburgh.
- STRANDBERG, WARREN (1972) *Professor of Education and Dean, School of Education*
B.A., University of Minnesota; M.A., M.A.T., Ph.D., Northwestern University.
- STUMP, BILLY LEE (1966) *Associate Professor of Chemistry*
B.S., Carson-Newman College; Ph.D., University of Tennessee.
- SUCEC, DAVID A. (1969) *Assistant Professor of Painting*
B.A., San Diego State College; M.A., San Francisco State College.
- SUNG, ALEXANDER (1974) *** *Instructor in Music Diploma, Hochschule für Musik und Darstellende Kunst "Mozarteum," Salzburg; Diploma, Hochschule für Musik und Darstellende Kunst, Austria.*
- SUTTONFIELD, JEAN P. (1971) *Instructor in Education*
B.S., M.Ed., Virginia Commonwealth University.
- SWARTZ, HENRY C. (1972) *Instructor in Fashion Design*
B.F.A., Pratt Institute.
- SWYERS, WILLIAM R. (1969) *Associate Professor of Education*
B.M.Ed., Murray State University; M.S., University of Notre Dame; Ed.D., University of Georgia.

- TAGGART, GEORGE B. (1971) *Assistant Professor of Physics*
B.S., College of William and Mary; Ph.D., Temple University.
- TALBERT, ROBERT MARTIN (1969) *Assistant Professor of History,
Philosophy, and Religious Studies*
B.A., Wake Forest University; B.D., Southeastern Baptist Theological
Seminary (N.C.); Ph.D., Hebrew Union College.
- TARTER, MARTIN A., JR. (1969) *Associate Professor of Education*
B.S., Virginia Polytechnic Institute and State University; M.Ed.,
Ed.D., University of Virginia.
- TAYLOR, R. DEAN (1972) *Associate Professor of
Rehabilitation Counseling*
B.A., M.A., Ed.S., Ph.D., University of Northern Colorado.
- TAYLOR, STANLEY E. (1973)*** *Assistant Professor of Urban Studies*
B.A., Hampton Institute.
- TECZAR, STEVEN WALTER (1972) *Instructor in Interior Design*
A.B., A.M., University of Missouri.
- TEMPLE, T. EDWARD, JR. (1974) *Professor of Urban Studies and
Vice-President for Development and University Relations*
B.S., M.Ed., College of William and Mary.
- TENNANT, DONALD B. (1952) *Professor of Music*
B.S., Ohio State University; M.M., University of Michigan; Ph.D.,
University of Iowa.
- THEDFORD, WILLIAM A. (1970) *Assistant Professor of Mathematical
Sciences*
B.S.; M.S., Oklahoma State University; Ph.D., New Mexico State
University.
- THOMAS, CHARLES W. (1969)** *Assistant Professor of Sociology*
B.S. McMurry College; M.A., Ph.D., University of Kentucky.
- THOMAS, EDWIN R. (1950, 1955) *Professor of Psychology*
B.A., University of Richmond; M.S., North Carolina State College;
Ph.D., Syracuse University.
- THOMAS, MARY ELLEN (1969) *Assistant Professor and Reference
Librarian*
B.A., Westhampton College; M.S., L.S., University of North Carolina.
- THOMAS, RONALD B. (1972) *Associate Professor and Chairman,
Department of Music*
Mus. B., Mus. M., Boston University.
- THOMPSON, CLYDE M. (1969) *Instructor in Business and Coordinator,
Management Center*
B.S., Virginia Commonwealth University; M.C., University of Rich-
mond.

**On educational leave

***Part-time

- THOMPSON, DAVID E. (1972)*Instructor in Sculpture*
B.A., Anderson College; M.F.A., Indiana University.
- THOMPSON, NANCY K. (1969)*Assistant Professor of Crafts*
B.S., Ball State Teachers College; M.F.A., Indiana University.
- THORNTON, JACK E. (1969)*Associate Professor of Finance*
B.S., M.S., Ph.D., University of North Carolina.
- THORNTON, VIRGINIUS B., III (1972)*Assistant Professor in History*
and Afro-American Studies
B.A., Virginia Union University; M.A., Virginia State College.
- THRALLS, LEO A. (1973)*Assistant Professor in Rehabilitation*
Counseling
A.B., University of Miami; M.R.C., University of Florida.
- TINSLEY, MARGARET G. (1968)*Instructor in English*
B.A., Westhampton College; M.A. University of Richmond.
- TIPTON, ROBERT M. (1966)*Associate Professor of Psychology*
B.S., M.S., Virginia Commonwealth University; Ph.D., University of Missouri.
- TISINGER, BETTY J. H. (1973)*Assistant Professor of Art Education*
A.B., Berea College; M.A., Madison College; D.Ed., Pennsylvania State University.
- TRENCHARD, WILLIAM H. (1973)*Instructor in Accounting*
B.S., Tusculum College; M.S., Virginia Commonwealth University.
- TROPP, EMANUEL (1966)*Professor of Social Work*
B.S.S., College of the City of New York; M.S.S.W., Columbia University School of Social Work.
- TSUCHIYA, RONALD R. (1973)*Assistant Professor of Physical*
Education
B.S., M.S., Indiana University.
- TUCKER, WOODIE L. (1957)*Professor of Business Education*
and Office Administration
B.S., University of Virginia; M.Ed., Ph.D., University of Pittsburgh.
- TURNBULL, COLIN M. (1973)*Professor of Sociology*
B.A. M.A., B.Litt., D.Phil., Oxford University.
- TURPIN, WILLIAM H. (1969)*Assistant Professor of*
Mass Communications
A.B., University of Georgia; M.A., University of Florida.
- ULLMAN, ROBERT M. G. (1969)****Instructor in Interior Design*
B.S., University of Virginia.
- UMBERGER, PAUL M. (1959)*Assistant Professor of Business*
B.S., M.S., Virginia Polytechnic Institute and State University.

- UROFSKY, MELVIN I. (1974) *Associate Professor of History and
Chairman, Department of History*
A.B., M.A., Ph.D., Columbia University.
- URQUAHART, SHARI (1972) *Instructor in Painting and Printmaking*
B.S., M.S., M.F.A., University of Wisconsin.
- VACCA, RICHARD S. (1967) *Associate Professor of Education and
Assistant Dean, School of Education*
A.B., Lafayette College (Pennsylvania); M.S., State University of
New York at Oneonta; Ed.D., Duke University.
- VANDEN BERGH, BRUCE (1971) . . . *Instructor in Mass Communications*
A.B., Rutgers University; M.S., University of Illinois.
- VAN DE WALLE, JOHN (1973) *Assistant Professor of Education*
B.A., Bellarmine College; M.S., Saint Louis University; Ph.D., Ohio
State University.
- VAN WINKLE, LESTER (1969) *Assistant Professor of Sculpture*
B.S., East Texas State University; M.A., University of Kentucky.
- VAN WOLKENTEN, RAYMOND V., JR. (1974) . . . *Assistant Professor of
Information Systems and Mathematical Sciences*
B.S., University of North Carolina; M.S., Georgia Institute of Tech-
nology.
- VENTURINO, ERNIE (1971)*** *Instructor in Athletics*
- VIRGO, JOHN M. (1972) *Assistant Professor of Economics*
B.A., M.A., California State College, Fullerton; M.A., Ph.D., Clare-
mont Graduate School.
- VLAHCEVIC, SONIA K. (1966)** *Assistant Professor of Music*
B.A., New England Conservatory; M.M., Western Reserve University.
- WALDMAN, RUTH E. (1971) *Instructor in Theatre*
B.A., Queens College; M.F.A., University of Wisconsin.
- WALKER, J. CAROL (1973)*** *Instructor in French*
B.A., Georgetown University; M.A., University of Kentucky.
- WALKER, RUBY CLAYTON (1970) . . . *Assistant Professor of Social Work*
B.S., Virginia Union University; M.S.S.W., Virginia Commonwealth
University.
- WARMENHOVEN, HENRI J. (1968) . *Assistant Professor of Political Science*
LL.B., LL.M., University of Leyden; M.A., Ph.D. University of Mel-
bourne, Australia.
- WASHER, LOIS MCG. (1940) *Professor Emerita of Social Welfare*
B.S., Carnegie Institute of Technology; M.S.S.W., Virginia Common-
wealth University.

**On educational leave

***Part-time

- WEAVER, CARL G. K. (1968)* * *Assistant Professor of Business*
B.S., M.S., Virginia Commonwealth University.
- WEDEL, KENNETH R. (1972) *Assistant Professor of Social Work*
B.A., Kansas State College; M.S.W., Florida State University; Ph.D.,
University of Pittsburgh.
- WELCH, MARY G. (1971) *Instructor in English*
A.B., Emmanuel College (Boston); M.A., University of Kansas (Law-
rence).
- WELCH, RIZPAH L. (1967) *Associate Professor of Education*
and Chairman, Department of Special Education
B.S., Elizabeth City (N.C.) Teachers College; M.S., Ed.D., Indiana
University.
- WELCH, THOMAS M. (1971) *Instructor in English*
B.A., University of Nebraska at Omaha; M.A., University of Kansas
(Lawrence); Ph.D., University of Kansas (Lawrence).
- WELLS, MABEL G. (1973) *Assistant Professor of Social Work*
B.A., Howard University; M.S.W., Howard University.
- WELZEL, ALVIN K. (1968) *Associate Professor and Acting*
Chairman, Department of Retailing
B.S., Rutgers University; M.S., New York University.
- WESTERMAN, ROBERT R. (1972) *Assistant Professor of*
Information Systems
B.S., U.S. Naval Academy; M.P.H., University of North Carolina;
M.A., Ph.D., University of Pennsylvania.
- WESTERMANN, HARLAND W. (1969) *Professor of Urban Studies*
and Dean, School of Community Services
B.A., M.A., George Washington University; Ph.D., Clark University.
- WETTON, PHILIP S. (1969) *Instructor in Printmaking*
Diploma, Coventry College of Art.
- WHITE, JOHN ELLINGTON (1973) *Instructor in English*
B.A., Kenyon College; M.A., Johns Hopkins University.
- WHITE, ROBERT L. (1973) *Office of Library Research*
A.B., California State University; M.P.A., M.L.S., University of South-
ern California.
- WHITESELL, J. EDWIN (1966) *Professor of English*
A.B., Randolph-Macon College; M.A., Ph.D., Harvard University.
- WIKSTROM, NELSON (1971) *Assistant Professor of Political Science*
B.A., Northeastern University; M.A., Ph.D., University of Connecti-
cut.

* * On educational leave

- WILHJELM, C. CHRISTIAN (1972)****Instructor in Music*
B.M.E., New England Conservatory of Music.
- WILLIAMS, JACKIE G. (1957)*Assistant Professor of Accounting*
B.S., Madison College; M.S., Virginia Commonwealth University.
- WILLIAMS, J. SHERWOOD (1971)*Assistant Professor of Sociology*
B.A., California State College at Long Beach; M.A., California State
College at Los Angeles; Ph.D., Washington State University.
- WILLIAMS, JANE D. (1970)*Instructor in Business Education and*
Office Administration
B.S., M.S., Virginia Commonwealth University.
- WILLIAMS, EARL (1973)*Assistant Professor of Education*
B.S., Troy State College; M.Ed., Florida Atlantic University.
- WILLIS, H. DAVID (1956)*Associate Professor of Accounting*
B.S., West Virginia University; M.Ed., Virginia Polytechnic Institute
and State University.
- WINDMUELLER, OTTI Y. (1953)*Associate Professor of Fashion Design*
and Chairman, Department of Fashion Design
Journeyman Costume Designer, trained in Germany; B.F.A., Virginia
Commonwealth University; Diploma, Munich.
- WINEBRENNER, DANIEL K. (1967)*Assistant Professor of Crafts*
B.F.A., M.F.A., Rochester Institute of Technology.
- WINGFIELD, MERVYN W. (1970)*Professor and Chairman,*
Department of Accounting
A.B., College of William and Mary; M.S., University of Richmond;
Ph.D., University of Illinois; CPA.
- WINTERS, LAWRENCE J. (1972)*Professor and Chairman,*
Department of Chemistry
A.B., Washington University, St. Louis; Ph.D., Kansas University.
- WISE, MICHAEL S. (1972)*Assistant Professor of Recreation*
B.S., North Carolina State University; M.S., Indiana University;
Ed.D., University of Georgia.
- WITT, TOM D. (1973)*Assistant Professor of Interior Design*
B.A., M.A., M.F.A., University of California at Los Angeles.
- WOOD, D. ROBLEY, JR. (1968)** ...*Instructor in Business Administration*
and Management
B.A., Emory University; M.S., University of Tennessee.
- WOOD, JAMES A. (1969) ..*Associate Professor of Mathematical Sciences*
B.S., Georgetown University; M.A., Ph.D., University of Virginia.

**On educational leave

***Part-time

- WOODLIEF, ANN M. (1972)*Assistant Professor of English*
B.A., M.A., Wake Forest University; Ph.D., University of North Carolina.
- WRIGHT, KEITH C. (1957)*Professor of Rehabilitation Counseling*
A.B., M.A., Marshall College.
- WUSLICH, MILDRED L. (1963)*Assistant Professor of Music (Piano)*
B.M., M.M., Conservatory of Music, University of Cincinnati.
- YAROWSKY, MORRIS (1969)*Assistant Professor of Painting*
A.B., Dartmouth College; M.F.A., California College of Arts and Crafts.
- YOUNG, ROBERT E. (1970)*Assistant Professor of Social Work*
B.A., Pennsylvania State University; M.S.S., Bryn Mawr School of Social Work; Third Year Certificate, University of Pennsylvania, School of Social Work; D.S.W., University of Pennsylvania.
- YUNG, RINGO (1970)*Assistant Professor of Interior Design*
B.A., Tientsin University; M.F.A., University of Kansas.
- ZACHARIAS, RICHARD K. (1970)*Instructor in English*
A.B., Dartmouth College; M.A., Ph.D., Indiana University.
- ZARISKI, RAPHAEL (1974)*Professor of Political Science*
and Chairman of the Department
A.B., A.M., Ph.D., Harvard University.

ADJUNCT FACULTY (1973-1974)

- Abell, Cameron D., B.S.*Health Education*
- Adkins, Chase M., Jr., B.S., M.S.*Business*
- Agee, Thomas H., Jr., B.A.*Mass Communications*
- Ahr, Paul R., A.B., Ph.D.*Psychology*
- Ailor, William H., Jr., B.S., B.Ch.E.*Mathematics*
- Allman, William T. B.S., M.S., Ph.D.*Biology*
- Asbury, William C., B.S., M.Ed.*Education*
- Bailey, Charlotte A., B.S., M.S.S.W.*Social Work*
- Ball, Elizabeth H., B.S., M.Ed.*Education*
- Barber, Robert R., Jr., B.S.*Mass Communications*
- Barbour, Muriel D., B.S.*Recreation*
- Bateman, Charles F., B.A., M.A.*History*
- Batts, Alger, Sr., B.S.*Music*
- Baughan, Susan, B.S., M.S.*Education*
- Baynham, Thomas L., B.S., M.S.S.W.*Social Work*
- Beacham, Erin J., B.A., M.A.*German*
- Bell, Richard A., B.A., M.A.*English*
- Berger, Rudolph O., Jr., Certificate*Interior Design*
- Berman, Myron, B.S.S., M.A., Ph.D.*Religious Studies*
- Berry, William W., B.S.E.E., M.C.*Business*
- Betts, Larry G., B.A., M.S.W.*Community Services*
- Birdsell, John J., B.A.*Administration of Justice and Public Safety*

Blandford, Robert Lee, B.A., M.A.	<i>Afro-American Studies</i>
Blem, Leann, B.S., M.S.	<i>Biölogy</i>
Bobbitt, Donald E., B.S., M.S.	<i>Engineering Technology</i>
Boswell, Robert F., Jr., B.A.	<i>Chemistry</i>
Boswell, Sanford L., B.S., M.B.A.	<i>Business</i>
Bourlas, Manuel, B.S., M.S.	<i>Chemistry</i>
Boyd, George L., B.A., M.A.T.	<i>Afro-American Studies</i>
Boykin, J. Reese	<i>Music</i>
Brannon, Marshall, B.A., M.A.	<i>Education</i>
Bremer, Sandra J., B.F.A., M.F.A.	<i>Crafts</i>
Briceland, Penelope Warren, A.B., M.A.	<i>History</i>
Brocklehurst, Robert L., B.A., M.S.	<i>Rehabilitation Counseling</i>
Brooks, John G., B.S., M.S.	<i>Mathematics</i>
Brown, Barbara A., A.B., M.A.	<i>Music</i>
Brown, Donald L., B.Arch.	<i>Engineering Technology</i>
Brown, John S., A.B., B.D., Th.M., Th.D.	<i>Community Services</i>
Bryant, J. Howard, B.A., M.A., Ph.D.	<i>Business</i>
Bryant, Vincent L.	<i>Retailing</i>
Bryce, Lucinda H., A.B.	<i>Mathematics</i>
Buckner, Gerald L., B.S.	<i>Engineering Technology</i>
Burke, John R., A.B.	<i>Mass Communications</i>
Burley, Carlton E., A.B., M.S.Ed., M.S.	<i>Mathematics</i>
Burnett, Marquis B., B.F.A.	<i>Mass Communications</i>
Bynum, Ellen, B.A., M.S.	<i>Sociology</i>
Callahan, Errett, B.A., M.F.A.	<i>Anthropology</i>
Canup, Robert E., B.A.	<i>Engineering Technology</i>
Carden, Jeanette F., B.S., M.A.	<i>English</i>
Carlton, Richard H., B.A., M.S.	<i>Mass Communications</i>
Carr, John C., B.A., M.A.	<i>Mass Communications</i>
Carrington, William T., B.A., M.A.	<i>History</i>
Cartwright, Dennis H., A.B., M.S.	<i>Mathematics</i>
Challis, David J., B.A., M.A., Ph.D.	<i>Spanish</i>
Chappell, V. Glenn, Jr., B.S., Ph.D.	<i>Economics</i>
Chase, Carolé F., B.A., M.A., Ph.D.	<i>Religious Studies</i>
Chenault, Genevieve G., B.A., M.A.	<i>English</i>
Childress, G. Wesley, Jr., B.S., M.S.	<i>Mathematics</i>
Chilson, Oliver B., B.S., M.B.A.	<i>Business</i>
Chiu, Chi-Lian, B.S.	<i>Chemistry</i>
Chiu, Ning Yu, B.S.	<i>Chemistry</i>
Christian, Clarice, B.A., M.Ed.	<i>Education</i>
Cisne, Maxwell G., B.S., M.C., C.P.A.	<i>Business</i>
Clay, Horace E., B.A., M.Ed.	<i>Education</i>
Cloninger, Carroll A., B.A., M.Ed., D.Ed.	<i>Education</i>
Coleman, Wendell L., B.S., M.Ed.	<i>Recreation</i>
Collins, Gladys B., B.S., M.S., Ed.D.	<i>Education</i>
Collins, Tanner A., B.S., M.A.	<i>Education</i>
Connors, Joyce Z., M.A.	<i>English</i>
Coppage, William Thomas, B.A., M.Ed., M.S.	<i>Rehabilitation Counseling</i>
Correia, Charles A., B.S., M.A., M.S.	<i>Mathematics</i>
Cosby, James L., B.S., M.S.	<i>Business</i>

Costello, James M., B.F.A.	<i>Drama</i>
Couchman, Peter R., B.Sc., M.S.	<i>Mathematics</i>
Craig, Barry P., A.B., M.Ed.	<i>Community Services</i>
Creasy, Gordon F., B.S., M.S.	<i>Business</i>
Crockin, Lucy G., B.S., M.S.	<i>Community Services</i>
Crump, Juliette T., A.B.	<i>Physical Education</i>
Cunningham, Jacquelyn M.	<i>Library Science</i>
Cutler, S. James, B.S., M.S.	<i>Rehabilitation Counseling</i>
Daffron, Philip V., B.A., M.A., J.D.	<i>English</i>
Davis, Edward M., B.A., M.S.	<i>Hebrew</i>
Davila, Jose R., Jr., B.A., LL.B.	<i>Community Services</i>
Deane, Brian C., B.A., M.A.	<i>Philosophy</i>
DeCair, Richard L., B.A., M.A.	<i>Political Science</i>
DeNoia, Michael D., B.A., M.Ed.	<i>Education</i>
DeWell, Robert E., B.M., M.M.	<i>Music</i>
Dirks, Helen V., B.F.A.	<i>Interior Design</i>
Dietrick, William M., B.A.	<i>Mass Communications</i>
Dillard, Margaret M., B.F.A.	<i>Fashion Design</i>
Dintiman, Elda C., B.S., M.A.	<i>Spanish</i>
Doub, Betty A., B.A., M.A.	<i>Psychology</i>
Dunn, Charles L., B.S.C.E.	<i>Engineering Technology</i>
Dunn, Elisabeth O., Diploma	<i>Russian, French</i>
Durett, Joseph R., Jr., B.S.C.E.	<i>Engineering Technology</i>
Durham, Joe D., B.S.Ed., M.Ed.	<i>Education</i>
Edwards, Clifford W., A.B., B.D., Ph.D.	<i>Religious Studies</i>
Edwards, Landon B., B.S.	<i>Biology</i>
Ellis, Joseph J., B.A., M.A.	<i>Sociology</i>
Emory, B. Lea, A.B.	<i>Business</i>
Emory, Samuel T., Jr., A.B., M.A., Ph.D.	<i>Geography</i>
Evans, Wade V., Jr., B.E.E.	<i>Engineering Technology</i>
Exton, Robert S., A.B., M.Ed.	<i>Recreation</i>
Fagan, Esther, B.A., M.A., M.S.	<i>Education</i>
Farnsworth, Clyde H., B.A., M.A., Ph.D.	<i>Economics</i>
Fielding, Michael F., B.S., M.S., Ph.D.	<i>Psychology</i>
Fine, Jack P., B.S., LL.B.	<i>Business</i>
Fives, Marilyn F., B.A., M.A.	<i>Political Science</i>
Flaig, Louis E., B.S., M.S.	<i>Business</i>
Fleming, Charles W., A.B., M.S.W.	<i>Community Services</i>
Fogle, Johnnie T., A.B., M.A.	<i>Education</i>
Foster, Charles H., B.S.E.E., M.B.A.	<i>Business</i>
Fouts, J. Samuel, B.A., LL.B.	<i>Mass Communications</i>
Frank, Donald S., B.A., M.A.	<i>Social Welfare</i>
Freda, Adolph F., B.A., M.A.	<i>French, Spanish</i>
Freed, Robert L., B.S., J.D., CPA	<i>Business</i>
Friedlander, Hilda M., B.S., M.S.	<i>Hebrew</i>
Fritz, Chester E., B.S.	<i>Physical Education</i>
Fulton, Jack M., B.A., J.D.	<i>Community Services</i>
Funkhouser, James B., B.S., M.D.	<i>Rehabilitation Counseling</i>
Gager, Helen M., A.B., M.A., Ph.D.	<i>Chemistry</i>
Garber, Charles N., B.S.E.E., M.B.A.	<i>Business</i>

Garcia, Maria A., M.A., Ph.D.	<i>Spanish</i>
Garland, Olivia J., M.A., Ph.D.	<i>SPC</i>
Geaslen, John W., B.S.	<i>Mass Communications</i>
Geimecke, Carl A.R., B.A.	<i>German</i>
Gerlitz, Ellen M., B.A., M.A.	<i>German</i>
Gerow, Clare W., B.S., Ph.D.	<i>Mathematics</i>
Gill, George M., Jr., B.S., M.S.	<i>Business</i>
Gillenwater, Willie H., B.A.	<i>Education</i>
Gillespie, George G., B.A.	<i>Retailing</i>
Gish, Elmer H., B.A., M.A.	<i>Education</i>
Glantz, Medora B., B.A., M.A.	<i>Anthropology</i>
Greene, Jeroyd W., Jr., B.A., LL.B., M.A.	<i>Afro-American Studies</i>
Griffis, Robert J., B.A., M.A.	<i>Economics</i>
Griffith, Kenneth E., B.S., M.A.	<i>Sociology</i>
Hackett, Melba M., B.S.	<i>Fashion Design</i>
Haile, William G., B.S., M.B.A.	<i>Business</i>
Hair, Simon P., B.A., M.S.W.F.	<i>Social Welfare</i>
Hall, Fletcher, B.A., M.Ed.	<i>Rehabilitation Counseling</i>
Hall, Franklin P., B.S., M.B.A., J.D.	<i>Business</i>
Hamel, Dana B., A.B., M.A., Ed.D.	<i>Education</i>
Hance, Kenneth G., Jr., B.A., J.D.	<i>Urban Studies</i>
Hanna, John T., B.S.	<i>Law Enforcement</i>
Harris, Charlotte J., B.A., M.A.	<i>History</i>
Hasker, Richard E., B.S., M.A.	<i>English</i>
Hatchell, George A., B.S.C.E.	<i>Engineering Technology</i>
Haverty, Anita D., B.S., M.S.	<i>Business</i>
Hawkins, Thelma P., B.S., M.A.	<i>Speech</i>
Hawner, Pierre H., B.S., B.B.A.	<i>French</i>
Hayes, Ronald L., B.A.	<i>Psychology</i>
Hedgepeth, Thelma W., B.S., M.S.	<i>Mathematics</i>
Heflin, Leland E., B.S., M.A.	<i>Business</i>
Helton, Pelham G.	<i>Education</i>
Hiedemann, Vivian H., B.A., M.A.	<i>German</i>
Highfill, C. Page, B.Arch.	<i>Engineering Technology</i>
Hill, Robert F., B.B.A., M.S.	<i>Business</i>
Hirschhorn, Ira D., B.S., Ph.D.	<i>Pharmacy</i>
Hobson, Melvin C., Jr., B.S., M.S., Ph.D.	<i>Chemistry</i>
Hockman, Jucson D., B.A., M.A.	<i>Community Services</i>
Hodges, Sophia U., A.B., M.A.	<i>English</i>
Hoffman, Alice P., B.A., M.A.	<i>Speech</i>
Hoffman, David, B.S., M.S.	<i>Physical Education</i>
Houston, Ann F., B.S., M.S.	<i>Rehabilitation Counseling</i>
Howell, Raymond P., B.Arch., M.C.	<i>Engineering Technology</i>
Hugo, John A., B.A., M.A., Ph.D.	<i>Psychology</i>
Humphrey, Thomas M., B.S., M.S., Ph.D.	<i>Economics</i>
Humphreys, Frank	<i>Engineering Technology</i>
Hunt, William H., B.S., M.A.	<i>Physics</i>
Hurst, John H., B.S., M.Ed.	<i>Health Education</i>
Hydrick, Augustus S., B.A., LL.B.	<i>Business</i>
Ingles, Michael A., B.S.	<i>Community Services</i>

Inman, Joseph F.	<i>Genealogy</i>
Israel, David A., B.A., M.S., Ph.D.	<i>Psychology</i>
James, Richard P., B.S.M.E., M.C.	<i>Engineering Technology</i>
Jenkins, Herndon, B.S., Ph.D.	<i>Physical Education</i>
Jenkins, Wilbert L., B.S., M.S.	<i>Education</i>
Johnson, Carl W., B.S., M.C.	<i>Business</i>
Johnson, James D.	<i>Engineering Technology</i>
Johnson, Jo Ann S., B.A., M.A.	<i>English</i>
Johnson, Ronald C., B.S., M.S.	<i>Urban Studies</i>
Johnson, Thomas A., B.A., M.A.	<i>Political Science</i>
Johnson, Wilma, B.A.	<i>German</i>
Jollie, Ludmila G., B.S., M.A.	<i>Geography</i>
Jones, Frederick L., B.A., M.S., Ph.D.	<i>Education</i>
Jordan, Lewellyn L., B.A., M.A.	<i>History</i>
Kang, John C., B.A., B.S.	<i>Chinese</i>
Kaplan, Lawrence, B.A.	<i>Psychology</i>
Kass, Carole G.	<i>Art History</i>
Kato, Simone M.	<i>French</i>
Keesecker, Gary R., B.S.E.E.	<i>Engineering Technology</i>
Kennedy, Joseph, B.S., M.H.E.	<i>Music History</i>
Kent, Janet N., B.S.	<i>Physical Education</i>
Kerby, Merle D., Jr., B.A.	<i>Sociology</i>
Kilduff, Mark R., A.B., M.B.A.	<i>Business</i>
King, Clarence F., B.S.C.E.	<i>Engineering Technology</i>
King, Irving R., B.S.	<i>Physics</i>
Koch, George P., B.Com.	<i>Engineering Technology</i>
Koolage, Kathryn K., B.A.	<i>Retailing</i>
Kornfeld, Richard A., B.S., Ph.D.	<i>Chemistry</i>
Krueger, Ralph F., B.S.	<i>Mass Communications</i>
Laban, Linda F., B.A.	<i>English</i>
LaCourse, Roger L., B.G.E., M.Ed.	<i>Education</i>
LaFratta, Carl W., M.D.	<i>Rehabilitation Counseling</i>
Lambert, Susan R., B.S.	<i>Business</i>
Langley, Thomas W., A.S., B.S.	<i>Engineering Technology</i>
LaPrade, James W.	<i>Photography</i>
Lau, Kenneth W., B.S., M.S., Ph.D.	<i>Chemistry</i>
Laude, Isabella, B.S., M.S.	<i>Education</i>
Lawrence, R. Quigg, B.A.	<i>Mass Communications</i>
Lawson, Jerry, B.S., M.S.	<i>Rehabilitation Counseling</i>
Lawson, Robert G., B.A., M.A.	<i>Rehabilitation Counseling</i>
Lazar, Joel M., A.B., M.A.	<i>Psychology</i>
Leaghty, Clark D., B.S.E.E.	<i>Engineering Technology</i>
Leffers, Beverly R., B.S.	<i>Education</i>
Leone, Philip A., B.S., M.U.R.P.	<i>Urban Studies</i>
Levy, Sander A., B.S., B.A., M.S., Ph.D.	<i>Physical Science</i>
Liberto, I. Peter	<i>Italian</i>
Lilienkamp, Diane K., B.A.	<i>Sociology</i>
Lilienkamp, Paul F., B.S., M.A., Ph.D.	<i>Philosophy</i>
Losen, Carl P., B.A., B.Th., M.Th., D.Th.	<i>History</i>
Mabe, G. Ann, B.S., M.S.	<i>Sociology</i>

Makhlouf, Avril Mary, B.A., Ph.D.	<i>Religious Studies</i>
Mallory, Fred C., B.A., B.D., Th.D.	<i>Philosophy</i>
Marks, Robert R., B.S., M.A., Ed.D.	<i>Education</i>
Martin, E. Davis, Jr., B.S., M.S.	<i>Community Services</i>
Martin, Sally, B.S.	<i>Music Education</i>
Mason, Craig A., B.B.A., M.S.	<i>Business</i>
Mason, Florence J., B.S., M.A.	<i>Education</i>
Mason, Jack L., B.S., M.Ed., Ph.D.	<i>Graduate Studies</i>
Massello, Jon F., B.S., M.A.	<i>Physical Education</i>
Massie, Robert, B.A., M.A.	<i>Education</i>
Masullo, Antonio, LL.B.	<i>Latin</i>
Matthews, Thomas L., Jr., B.A., M.A.	<i>Psychology</i>
Mattone, Frank M., B.A., M.C.	<i>Engineering Technology</i>
McCann, Richard J., B.A., M.A.	<i>Art History</i>
McCartha, Carl W., A.B., M.A., Ed.D.	<i>Education</i>
McCarthy, Gerald P., M.S.E., B.E.	<i>Urban Studies</i>
McClenney, Earl H., Jr., B.S., M.A.	<i>Political Science</i>
McClurkin, J. Irving, B.S., M.S., Ph.D.	<i>Biology</i>
McDonald, Jacqueline S.	<i>French</i>
McDorman, Hazel E., B.S., M.Ed.	<i>Education</i>
McFee, Charles B., Jr., B.S.	<i>Mass Communications</i>
McGee, Jack D., B.S.	<i>Engineering Technology</i>
McGhan, Barbara H., B.A.	<i>Philosophy</i>
McTeer, Robert D., Jr., B.B.A., Ph.D.	<i>Economics</i>
Meadors, George S., B.A.	<i>Engineering Technology</i>
Medlin, Stuart B., B.A., M.A.	<i>History</i>
Merritt, Charles H., B.S., M.S.	<i>Rehabilitation Counseling</i>
Meyer, Norva J., B.S., M.A.	<i>Geography</i>
Milkes, Anne K., B.A., M.Ed.	<i>Continuing Education</i>
Miller, Anne F., A.B., M.H.	<i>Education</i>
Miller, Arthur G., Certificate	<i>Engineering Technology</i>
Miller, Robert M., B.S., M.S.	<i>Mass Communications</i>
Monk, Joe, B. S., M.F.A.	<i>Crafts</i>
Moody, Juliette F., A.B., M.Ed.	<i>Education</i>
Moore, David P., B.S., M.Ed.	<i>Education</i>
Morchower, Michael, B.A., LL.B.	<i>Community Services</i>
Moseley, Arthur M., B.S.C.E.	<i>Engineering Technology</i>
Mosher, Betty P., B.S., M.S.	<i>Business</i>
Murphy, Marsha H., B.A., M.A.	<i>History</i>
Murphy, Patrick L., M.C., B.S.	<i>Retailing</i>
Nance, Joe C.	<i>Engineering Technology</i>
Naylor, Harriet H., A.B., M.A.	<i>Rehabilitation Counseling</i>
Nelson, William, B.S., M.S.	<i>Community Services</i>
Nesbett, Marion B., B.S., M.A., Ed.D.	<i>Education</i>
Newcomb, C. Lynn, B.A., M.Ed.	<i>Health Education</i>
Newpol, Leo S., B.S., M.A., M.S.W.	<i>Social Work</i>
Noel, John, B.F.A., M.F.A.	<i>Crafts</i>
Ogburn, Thomas J., B.A.	<i>Physical Science</i>
O'Hanlan, Tracy, M.D.	<i>Rehabilitation Counseling</i>
Oslund, Margaret G., A.B., M.A., D.Pub.Adm.	<i>Urban Studies</i>

Paessler, Alfred H., B.S.	<i>Political Science</i>
Pandiello, Estela, Ph.D.	<i>Spanish</i>
Papke, Joan H., B.A.	<i>Social Welfare</i>
Pastuhov, Catherine, B.A., Ph.D.	<i>Russian</i>
Pastuhov, Serge V., B.A., M.A.	<i>Foreign Language in English Translation</i>
Patchens, Donald S., B.S.	<i>Hebrew</i>
Patrick, Eddie N., B.A., M.A.	<i>Education</i>
Payne, Dorris H., B.S., M.A.	<i>Education</i>
Peek, Leon A., B.S.	<i>Psychology</i>
Pembroke, Albert N., B.S.	<i>Engineering Technology</i>
Pearlstein, Dorothy B., B.S., M.Ed.	<i>Education</i>
Perrins, Barbara P., Baccalaureate	<i>Italian</i>
Petty, Linda C., B.A., M.A.	<i>Psychology</i>
Phillips, Mary D., B.A.	<i>Speech</i>
Pillow, Sheila, B.M.E.	<i>Music</i>
Poole, Roger C., A.B., M.B.A.	<i>Business</i>
Presson, Gail C., B.A.	<i>Art Education</i>
Pross, Irene D.	<i>French</i>
Puccinelli, O. Ralph, Jr., B.S., M.S., CPA	<i>Business</i>
Purnell, John C., Jr., B.A., M.S.S.W.	<i>Social Work</i>
Quinn, Peter J., B.A.	<i>Mass Communications</i>
Ragan, David J., B.A., M.A.	<i>Philosophy</i>
Raines, James L., B.S.	<i>Education</i>
Reid, John S., B.A., M.Ed.	<i>Engineering Technology</i>
Reilly, Linda C., A.B., M.A., Ph.D.	<i>Art History</i>
Resnick, Robert J., A.B., M.A., Ph.D.	<i>Education</i>
Reynolds, Dorothy D., B.S., M.Ed.	<i>Library Science and Education</i>
Reynolds, Jesse A., B.S.	<i>Recreation</i>
Reynolds, Melvin J., B.S.	<i>Retailing</i>
Richardson, S. S., B.S., M.A.I.	<i>Business</i>
Rider, D. Brickford, B.S.	<i>Mass Communications</i>
Ritz, Michael C., B.S., M.S.	<i>Urban Studies</i>
Roberts, Thomas C., B.M.E., C.P.E.	<i>Engineering Technology</i>
Robertson, Donald P., B.S.	<i>Engineering Technology</i>
Robinson, Thomas H., B.S., J.D.	<i>Business</i>
Robinson, William R., B.A.	<i>Philosophy</i>
Rollins, Darrell, A.B., M.R.E.	<i>Afro-American Studies</i>
Roques, Charles R., B.F.A.	<i>Photography</i>
Rosecrans, John A., B.S., M.S., Ph.D.	<i>Biology</i>
Rublely, Earl A., B.S., M.S., Ph.D.	<i>Geography</i>
Ruffa, Carmine Anthony, B.A.	<i>Latin</i>
Rule, Jane B., B.A., M.Ed.	<i>Rehabilitation Counseling</i>
Ryan, Jeanne C., B.A., M.A.	<i>English</i>
Sahli, Muhammad S., B.S., Ph.D.	<i>Chemistry</i>
Sale, Marian M., B.A., M.A.	<i>English</i>
Sansing, Peggy J., B.A., M.S.	<i>Mathematics</i>
Satterwhite, Robert A., Jr., B.S.	<i>Music Education</i>
Sauer, David F., B.F.A., M.A.	<i>Painting and Printmaking</i>
Schacht, Richard J.	<i>Physical Education</i>
Schindler, Joseph F., B.S., M.S.	<i>Business</i>

Schroetter, Hilda N., A.B., M.A.	<i>English</i>
Schroetter, Samuel T., A.B., M.A.	<i>Education and History</i>
Schwartz, Helen, B.S.	<i>Business</i>
Scott, Joyce S., A.B., M.A.	<i>English</i>
Scura, Dorothy M., B.S., M.A., Ph.D.	<i>English</i>
Seward, William H., B.S.	<i>Psychology</i>
Shanklin, James R., Jr., B.A., Ph.D.	<i>Chemistry</i>
Sherman, Jackson I., B.A., M.A.	<i>Sociology</i>
Shuler, Ralph N., Jr., B.S.	<i>Mathematics</i>
Sieffermann, Richard L., B.S. Comm.	<i>Audio Visual Education</i>
Singh, Betsy B., B.S.	<i>Sociology</i>
Sisson, Francis W., B.S., M.A., Ed.D.	<i>Education</i>
Slayden, Eugene R.	<i>Physical Education</i>
Slough, Carlton M., Certificate	<i>Engineering Technology</i>
Smith, Aine P., B.S., M.Ed.	<i>History</i>
Smith, Hampden H., III, B.A., M.A.	<i>Political Science</i>
Smith, Katherine R., B.A., M.L.S.	<i>Library Science</i>
Smith, Lawrence D., A.B., M.B.A.	<i>Business</i>
Smith, Maria S., B.A.	<i>Spanish</i>
Smith, Ralston K., Jr., B.S., M.S.	<i>Business</i>
Smith, Richard E., J.D.	<i>Business</i>
Smith, W. C., B.A., M.A.	<i>Foreign Literature in English Translation</i>
Smith, Willard L., B.C.P., M.A.	<i>Business</i>
Snavelly, George Y., B.S.	<i>Engineering Technology</i>
Snider, Sanford D., B.S., M.A.	<i>Education</i>
Snider, Thomas E., B.S., M.S., Ph.D.	<i>Economics</i>
Spangenthal, Mary, B.A., M.A.	<i>Education</i>
Spagnola, Joseph A., B.S., M.A., Ed.D.	<i>Education</i>
Sparks, Kenneth Roger, B.S., M.S., Ph.D., J.D.	<i>Mass Communications</i>
Spiers, Helen H., B.S., M.Ed.	<i>Music</i>
Spiro, Jack D., B.A., M.A., D.H.L.	<i>Religious Studies</i>
Steele, Richard G., A.A., B.S., M.S.	<i>Business</i>
Stone, Fordyce C, B.S., M.A.	<i>Education</i>
Story, Geraldine B., B.S., M.S.	<i>Business</i>
Sublett, Christopher, B.A., M.F.A.	<i>Crafts</i>
Swyers, Betty J., B.A., M.Ed.	<i>Education</i>
Taylor, George S., B.S., M.S.W., Ph.D.	<i>Sociology</i>
Thacker, Robert E., B.S., M.C.	<i>Economics</i>
Thedford, Carol A., B.A.	<i>Mathematics</i>
Thomas, Haley F., A.B., M.A.	<i>French</i>
Thomasson, Rosemary F., B.A.	<i>English</i>
Thompson, James W., B.S.M.E.	<i>Engineering Technology</i>
Thompson, Wayne, B.A., M.S., Ph.D.	<i>Psychology</i>
Thornton, Theodore E., B.S., M.S.W.	<i>Social Work</i>
Toney, Louise C., B.S., M.A.	<i>Health Education</i>
Toppin, Edgar A., A.B., M.A., Ph.D.	<i>History</i>
Townsend, William H., B.S., M.S.	<i>Business</i>
Tracy, Frank E., P.E.	<i>Engineering Technology</i>
Troiano, Robert, B.A., M.P.A., M.S.	<i>Community Services</i>
Troubetzkoy, Ulrich, A.A., B.A.	<i>English</i>

Trow, Randolph E., Jr., B.A., LL.B.	<i>Business</i>
Tucker, Neda B., B.S., M.Ed.	<i>Business</i>
Tucker, Reese H., B.S.	<i>Education</i>
Tudor, Mary Jo, B.S., M.A.	<i>History</i>
Tyler, Mary E., B.A., M.A.	<i>History</i>
Tyson, Anneliese G.	<i>German</i>
Ullman, Robert M., B.S.	<i>Interior Design</i>
Updike, Thomas F., B.S., Ph.D.	<i>Rehabilitation Counseling</i>
Vance, Robert L., B.S., Ph.D.	<i>Chemistry</i>
Van Winkle, Donna A., B.F.A.	<i>Theatre</i>
Vaughan, Jack H., Assoc. of Arts, B.S.	<i>Recreation</i>
Venable, William H. C., B.A., LL.B.	<i>Political Science</i>
Wagner, Eileen N. B.S., M.Ed.	<i>English</i>
Waldrip, Edward B., B.S., M.S.	<i>Biology</i>
Waleski, Walter L., B.A., M.B.A.	<i>Business</i>
Wallace, John H., A.B., M.S., Ph.D.	<i>Rehabilitation Counseling</i>
Ward, Henry Dillard, B.S., M.S.Ed.	<i>Physical Science</i>
Ware, Carol S., B.A., M.A.	<i>English</i>
Ware, Peggy M., B.A., M.A.	<i>Business</i>
Warren, Charles R., B.S.C.E.	<i>Engineering Technology</i>
Warriner, Helen P., B.A., M.A., Ph.D.	<i>Education</i>
Watkins, Edwin W., M.A., A.B.	<i>Latin</i>
Watkins, Laura L., A.B., M.A.	<i>Physical Education</i>
Watson, Toy F., A.B., M.S.S.W.	<i>Sociology</i>
Wei, Enoch P., B.A., Ph.D.	<i>Biology</i>
Weidenfeld, Rose G., B.S., M.Ed.	<i>Elementary Education</i>
Weissbecker, Betty, B.A.	<i>Mathematics</i>
Wessells, Frances D., B.A., M.A.	<i>Theatre</i>
Whelan, James E., B.S., B.S.C.E., M.S.	<i>Engineering Technology</i>
White, Jean F., B.A., M.A.	<i>English</i>
White, John Ellington, B.A., M.A.	<i>English</i>
White, Sarah, A., B.S., M.A.	<i>Sociology</i>
Whitener, Henry, B.M.E., M.M.E.	<i>Music</i>
Whitlock, A. Gaynelle, A.B., M.Ed.	<i>Education</i>
Wickham, Theresa G., B.S.	<i>Business</i>
Wiegand, Wayne A., A.B.	<i>Philosophy</i>
Wiggins, Joseph H., B.S., M.S.	<i>Community Services</i>
Wilkinson, James B., LL.B.	<i>Political Science</i>
Williams, Fred A., B.S.	<i>Community Services</i>
Williams, Thornton, A.B., M.A., Ph.D.	<i>Biology</i>
Williamson, Mary Ann, B.A., M.H.	<i>Humanities</i>
Willis, Mary Ann, B.F.A.	<i>Art Education</i>
Wilson, R. Shade, B.A., M.A.	<i>English</i>
Winston, Andrew J.	<i>Community Services</i>
Wood, Andrew W., B.A., LL.B.	<i>Business</i>
Wood, Edward M., B.S., M.B.A.	<i>Business</i>
Woolford, William W., B.S., M.T.S.	<i>Physical Science</i>
Wooten, Dal F., B.A., M.A.	<i>English</i>
Wrenn, James R., B.A., J.D.	<i>Business</i>
Young, Joy W., Cert. Ed., B.S.	<i>Biology</i>

INDEX

	Page
Academic Regulations	64
Academic Suspension	67
Academic Warning	67
Accounting	215
Accreditation	15
Add/Drop Registration	65
Administration of Justice and Public Safety	244, 256
Admissions	32
Adult Learning Center	272
Advanced Placement	28, 40
Advanced Scholars	26, 40
Advertising (See Mass Communications)	
Advising Program	64
Afro-American Studies	157
Alumni	30
Anthropology	146, 160
Application Fee	44
Application Materials and Deadlines	32
Armed Forces Service	70
Art Education	80, 92
Art Foundation Program	79, 91
Art History	81, 93
Arts and Sciences, School of	117
Arts, School of	76
Associate in Arts Degree	125
Attendance Regulations	64
Audit	21, 71
Automobiles	62
Bachelor of Arts Degree, General Requirements	119
Bachelor of Science Degree, General Requirements	121
Bachelor of Science Degree in Business, General Requirements	215
Biology	127, 161
Biology Education	281
Business Administration and Management	216
Business, Courses in	227
Business Education and Office Administration	217
Business, School of	214
Calendar	4
Career Opportunities Program (COP)	273
Career Planning and Placement	59
Categories of Student Enrollment	20
Center for Continuing Education	25, 226
Certification	271, 280
Change of Major	65
Change of Registration	65
Chemistry	128, 166
Chemistry Education	281
Child Study Center	272

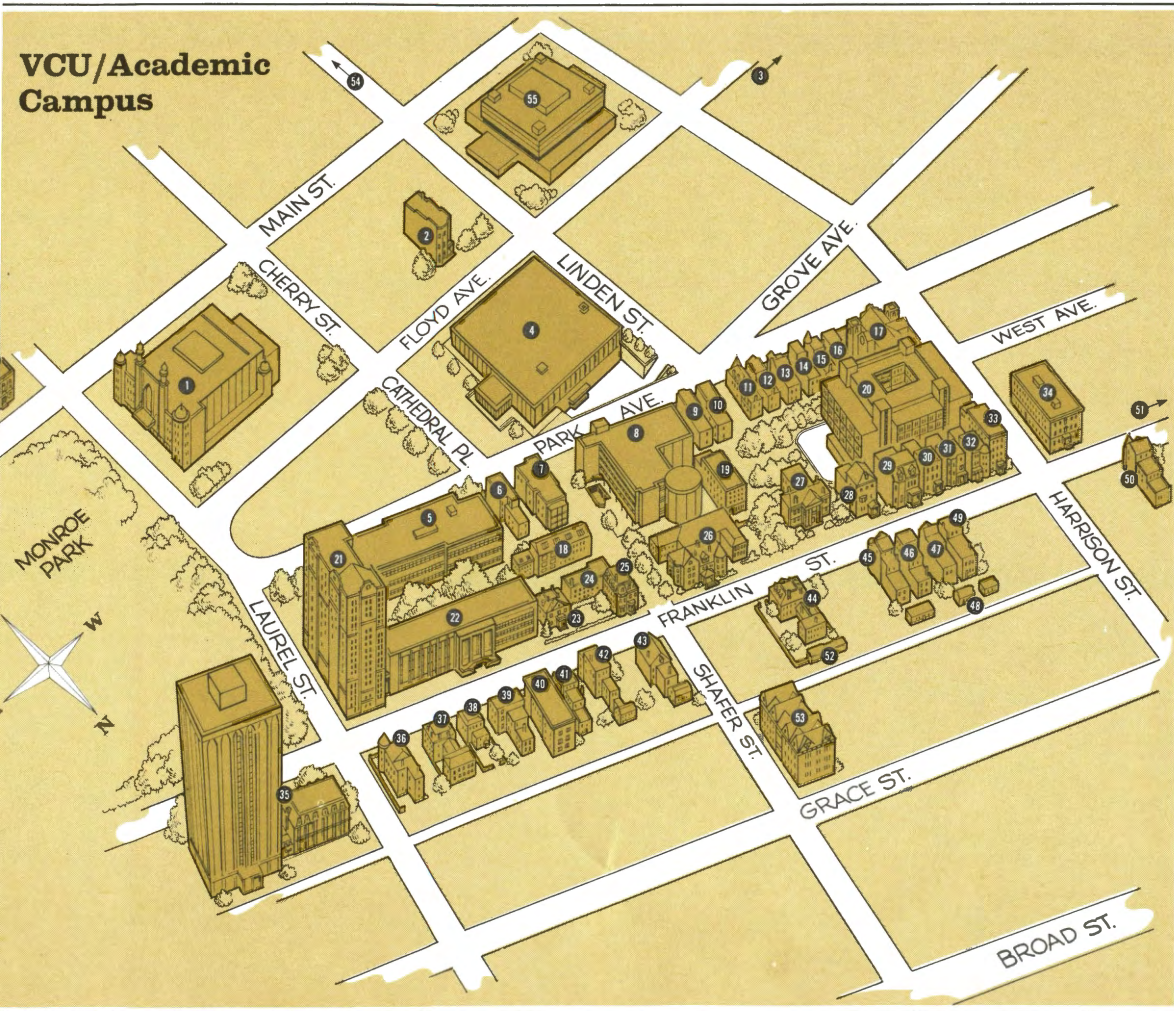
	Page
Chinese	168
Classification of Students	66
CLEP	29, 40
Club Football	61
Cobblestone	60
Commonwealth Times	60
College Level Examination Program (CLEP)	29, 39
Communication Arts and Design	81, 97
Community College Transfer Students	36
Community Services, Courses in	255
Community Services, General Requirements	243
Community Services, School of	242
Computer Center	225
Computer Science	140, 169
Continuance in College	66
Continuing Education	25, 226
Correspondence Courses	70
Counseling Service	58
Course Numbering	74
Crafts	82, 98
Dean's List	72
Degree Application Deadline	69
Degree Programs Offered	21
Degree Requirements, Academic Campus	68
Delinquent Accounts	50
Dental Hygiene	150
Dentistry	148
Distributive Education	282, 288
Double Major	69
Early Childhood Education	274
Economics	223, 237
Education, Courses in	289
Effective Bulletin	42
Elementary Education	273
Eligibility to Return	67
Engineering, Curriculum in	300
English	130, 170
English Education	282
Evaluation of Transfer Credits	35
Evening College	25
Expenses and Fees	44
Fashion Design	83, 100
Financial Assistance	51
Financial Assistance Deadlines	54
Food Service	58
Foreign Languages	132, 174, 175
Foreign Literature in English Translation	174
French	132, 175

	Page
French Education	283
Freshmen Admission Requirements	33
Full-time Student	73
General Science Education	286
General Studies Program	26
Geography	133, 177
German	177
Grade Point Deficiency	66
Grade Reports	70
Grading System	70
Graduate School Admission	41
Graduation Honors	72
Graduation Requirements, Academic Campus	68
Greek	179
Health Care Management	224
Health Education, Courses in	299
Health and Physical Education	275, 296
Health Service	58
Hebrew	179
History	133, 179
History/Social Science Education	284
Humanities Courses	157
Incomplete, Grade of	71
Information Systems	223
Insurance	49
Interdisciplinary Courses	157
Interior Design	83, 102
Intramural Sports	60, 279
Italian	185
Journalism (See Mass Communications)	
Language for Preliminary Arts	185
Language Skills	185
Latin	185
Law	156, 225
Learning Centers	29
Libraries and their Resources	16
Library Science	275, 295
Loan, Student	52
Management Center	226
Marketing	224
Mass Communications	134, 186
Mathematical Sciences (See Computer Science and Statistics) ..	138, 190
Mathematics Education	284
MCV Campus Admission	42
Medical Technology	151
Medicine	148

	Page
Music	84, 103
Non-degree seeking students	21
Nursing	152
Occupational Therapy	153
Organizations, Student	59
Painting and Printmaking	88, 109
Part-time Student	73
Pharmacy	154
Philosophy	140, 193
Photography	88, 111
Physical Science	141, 198
Physical Therapy	155
Physics and Physical Science	141, 196
Physical Education	285
Political Science	142, 198
Pre-Dental Hygiene	150
Pre-Dentistry	148
Pre-Law	156, 225
Pre-Medical Technology	151
Pre-Medicine	148
Pre-Nursing	152
Pre-Occupational Therapy	153
Pre-Pharmacy	154
Pre-Physical Therapy	155
Pre-Radiologic Technology	156
Pre-Veterinary Medicine	150
Psychology	143, 201
Project Head Start	272
Purposes and Objectives of the University	15
Radiologic Technology	156
Reading Center	272
Readmission	36
Reciprocity	271
Recreation	246, 259
Refunds	49
Rehabilitation Counseling	249
Rehabilitation Services	249, 261
Religious Studies	140, 205
Repeating Courses with "D" Grade	71
Resident Requirement	68
Retailing	224, 240
Russian	207
Scholarships	51
Scholarship Honors	72
Schools and Instructional Departments	17
Science, Bachelor of Science Degree in	144
Science Education Curricula	285

	Page
Secondary/Post Secondary Education	279
Second Baccalaureate Degree	41, 69
Second Suspension	68
Secretarial, Legal	221
Secretarial, Medical	222
Semester Credit Limitation	69
Senior Citizens Higher Education Program	29
Social Science, Courses in	157
Social Welfare	251, 263
Social Work, School of	302
Sociology	146, 208
Spanish	211
Special Charges	45
Special Day Student	21, 37
Special Education	286
Special Services Program	30
Special Students	21, 38
Speech	116
Spectrum	60
Statistics	140, 212
Student Activities	59
Student Activities Fee	46
Students and University Governance	61
Student Housing	57
Student Life and Services	56
Student Load	72
Student Services	57
Summer Orientation Advisement and Registration (SOAR)	56
Summer Sessions	25
Teacher Education, Admission to	269
Theatre	89, 112
Transcripts	73
Transfer Admission Requirements	35, 69
Transient Student	21
Tuition	44, 46
Undecided Student, Arts and Sciences	123
Undergraduate Credit by Examination	79, 124
Upper Level Requirements	68
Urban and Regional Planning	254
Urban Studies	252, 265
Veterinary Medicine	150
Virginia Resident, Requirements	45
Virginia Teacher Corps Consortium	272
Vocational Education Resource Materials Center	272
Withdrawal From College	73
WJRB Radio	60

VCU/Academic Campus



INDEX VCU/ACADEMIC CAMPUS

- 1 Mosque
- 2 Art Studios—913 Floyd Ave.
- 3 To Classrooms—Floyd Ave. and Morris St.
Convent—English Department
Catholic School—English Department
Cathedral High School—School of Education
- 4 James Branch Cabell Library
- 5 Science Building
- 6 Physical Plant—824 Park Ave.
- 7 Chalkley House—828 Park Ave.
- 8 Hibbs Building and Cafeteria—900 Park Ave.
- 9 Student Organization Building—912 Park Ave.
- 10 School of Education, English Department—914 Park Ave.
- 11 & 12 School of Education—918 - 20 Park Ave.
- 13 Music Studios—924 Park Ave.
- 14 History and Political Science—926 Park Ave.
- 15 Dormitory—928 Park Ave.
- 16 Faculty Offices—930 Park Ave.
- 17 Temple—Gaslight Theater and Cafeteria
- 18 Shafer Street Playhouse and Crafts Department
- 19 Anderson Gallery—School of the Arts
- 20 Theresa Pollak Building—School of the Arts
- 21 Margaret L. Johnson Hall—801 W. Franklin St.
- 22 Gymnasium Building and Classrooms—817 - 19 W. Franklin St.
- 23 Ritter-Hickok—821 W. Franklin St.
- 24 Crafts Department
- 25 Founders' Hall—827 W. Franklin St.
- 26 Administration Building, Academic Center, 901 W. Franklin St.
- 27 Dormitory—909 W. Franklin St.
- 28 Anderson House—913 W. Franklin St.
- 29 Student Services, Housing, Financial Aid—915 W. Franklin St.
- 30 & 31 Music Department—917 - 19 W. Franklin St.
- 32 & 33 Scherer Hall—923 W. Franklin St.
- 34 Raleigh Building—Social Work and Occupational Therapy
- 35 Rhoads Hall—710 - 16 W. Franklin St.
- 36 Psychology Department—800 W. Franklin St.
- 37 Dormitory—806 W. Franklin St.
- 38 Dormitory—808 W. Franklin St.
- 39 Psychology Department Offices—810 W. Franklin St.
- 40 Franklin Terrace—Community Services and School of the Arts
- 41 Community Services—816 W. Franklin St.
- 42 Sociology Department—820 W. Franklin St.
- 43 Philosophy and Religious Studies—826 W. Franklin St.
- 44 University Relations, Development—828 W. Franklin St.
- 45 VCU Administrative Offices—910 W. Franklin St.
- 46 Student Center—916 W. Franklin St.
- 47 VCU Police Department—918 W. Franklin St.
- 48 Admissions and University Services—920 W. Franklin St.
- 49 Sculpture Studio
- 50 Art History—922 W. Franklin St.
- 51 Meredith House—1014 W. Franklin St.
- 52 Learning Resources Center, School of Education—1617 Monument Ave.
- 53 Sculpture Studio
- 54 Lafayette Hall—312 N. Shafer St.
- 55 Physical Plant Warehouse and Shops—6 S. Linden St.
- 56 School of Business—1000 W. Main St.
- 57 Psychology Department—711 - 13 W. Main St.



VIRGINIA COMMONWEALTH UNIVERSITY BULLETIN

901 WEST FRANKLIN STREET, RICHMOND, VIRGINIA 23284

SPECIAL FOURTH CLASS BOOK RATE